

Service Service Service



Service Manual

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1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:

- 1.1 Technical Specifications
- 1.2 Connection Overview
- 1.3 Chassis Overview

Notes:

- Figures can deviate due to the different set executions.
- Specifications are indicative (subject to change).

1.1 Technical Specifications

1.1.1 Vision

Display type	: LCD
Screen size	: 42" (107 cm), 16:9
	: 47" (119cm), 16.9
Display area (HxV in mm)	: 697.6 x 392.2 (42")
Number of Pixels (HxV)	: 1360 x 768
Pitch (HxV in mm)	: 0.200x0.600 (37")
	: 0.227 x 0.681(42")
	: 0.761x0.761(47")
Colour pixel arrangement	: RGB vertical stripe
Display operating mode	: Transmissive mode
	: Normally black
Colour depth	: 16.7M colours (8-bit)
Brightness (cd/m ²)	: 500 (centre 1 pts, typ.)
Viewing angle (CR>10)	: R/L 178, U/D 178
Surface treatment	: Hard coating (3H)
Electrical interface	: LVDS
Response Time (ms)	: 5 (37"and 42")
	: 8 (32"and 47")
Contrast ratio	: 1000:1 (typ.)
Backlight	: 16 EEFL
Support Video Formats	: 720x400
	: 640x480
	: 640x350
	: 1024x768
	: 1280x768
	: 800x600
	: 1280x800
	: 1280x1024
	: 1440x900
	: 1680x1050
	: 1920x1080

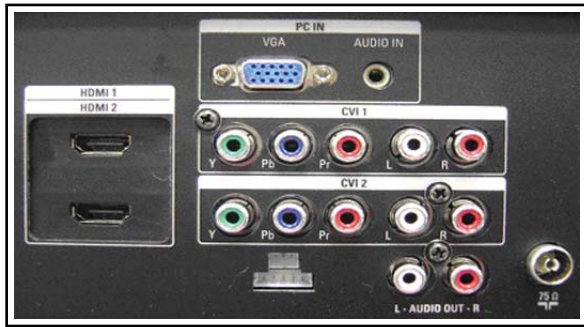
1.1.2 Sound

Sound systems	: PAL
	: NTSC
	: SECAM
Maximum power (W)	: 2x5 (32")
	: 2x10 (37", 42", & 47")

1.1.3 Miscellaneous

Power supply	
AC-input (V _{ac})	: 100 ~ 240
Power consumption (W)	: 150 max (32")
	: 180 max (37")
	: 220 max (42")
	: 300 max (47") (with Smart Card)
Power indicator	: LED (On: Blue, Sleep mode: Amber)
Auto power saving (W)	: < 18 with Smrt Crd,
	< 3.5 without Smrt Crd
Horizontal scan	
Horizontal	: 30 ~ 83 kHz
Vertical	: 56 ~ 76 Hz
Ambient conditions:	
-Temperature	: 0 ~ 40 °C
- Humidity	: 20 to 70%
Dimensions (WxHxD in mm)	: 593x809x220 (32")
	: 666x929x262 (37")
	: 721x1033x262 (42")
	: 793x1150x310 (47")
Weight (kg)	: 14.4 (32")
	: 19.8 (37")
	: 22 (42")
	: 33.4 (47")

1.2 Connection Overview



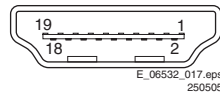
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Figure 1-1 Rear I/O connections

Note: The following connector colour abbreviations are used (acc. to DIN/IEC 757): Bk= Black, Bu= Blue, Gn= Green, Gy= Grey, Rd= Red, Wh= White, and Ye= Yellow.

1.2.1 Rear Connections

HDMI1 & 2: Digital Video, Digital Audio - In

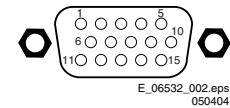


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Figure 1-2 HDMI (type A) connector

1	- D2+	Data channel	⊕
2	- Shield	Gnd	⊕
3	- D2-	Data channel	⊕
4	- D1+	Data channel	⊕
5	- Shield	Gnd	⊕
6	- D1-	Data channel	⊕
7	- D0+	Data channel	⊕
8	- Shield	Gnd	⊕
9	- D0-	Data channel	⊕
10	- CLK+	Data channel	⊕
11	- Shield	Gnd	⊕
12	- CLK-	Data channel	⊕
13	- n.c.		
14	- n.c.		
15	- DDC_SCL	DDC clock	⊕
16	- DDC_SDA	DDC data	⊕
17	- Ground	Gnd	⊕
18	- +5V		⊕
19	- HPD	Hot Plug Detect	⊕
20	- Ground	Gnd	⊕

VGA: Video RGB - In



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Figure 1-3 VGA Connector

1	- Video Red	0.7 V _{PP} / 75 ohm	⊕
2	- Video Green	0.7 V _{PP} / 75 ohm	⊕
3	- Video Blue	0.7 V _{PP} / 75 ohm	⊕
4	- n.c.		
5	- Ground	Gnd	⊕
6	- Ground Red	Gnd	⊕
7	- Ground Green	Gnd	⊕
8	- Ground Blue	Gnd	⊕
9	- +5V_dc	+5 V	⊕
10	- Ground Sync	Gnd	⊕
11	- n.c.		
12	- DDC_SDA	DDC data	⊕
13	- H-sync	0 - 5 V	⊕
14	- V-sync	0 - 5 V	⊕
15	- DDC_SCL	DDC clock	⊕

CVI 1 & 2: Cinch: Video YPbPr - In, Audio - In

Gn	- Video Y	1 V _{PP} / 75 ohm	⊕
Bu	- Video Pb	0.7 V _{PP} / 75 ohm	⊕
Rd	- Video Pr	0.7 V _{PP} / 75 ohm	⊕
Wh	- Audio L	0.5 V _{RMS} / 10 kohm	⊕
Rd	- Audio R	0.5 V _{RMS} / 10 kohm	⊕

Service Connector (ComPair)

1	- SDA-S	I ² C Data (0 - 5 V)	⊕
2	- SCL-S	I ² C Clock (0 - 5 V)	⊕
3	- Ground	Gnd	⊕

Audio Out: Cinch: Audio - Out

Rd	- Audio R	0.5 V _{RMS} / 10 kohm	⊕
Wh	- Audio L	0.5 V _{RMS} / 10 kohm	⊕

1.2.2 Side AV



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Figure 1-4 Side AV

AV Input: Cinch: Video CVBS - In, Audio - In

Rd	- Audio R	0.5 V _{RMS} / 10 kohm	⊕
Wh	- Audio L	0.5 V _{RMS} / 10 kohm	⊕
Ye	- Video CVBS	1 V _{PP} / 75 ohm	⊕

AV Input: S-Video (Hosiden): Video Y/C - In

1	- Ground Y	Gnd	⊕
2	- Ground C	Gnd	⊕
3	- Video Y	1 V _{PP} / 75 ohm	⊕
4	- Video C	0.3 V _{PP} / 75 ohm	⊕

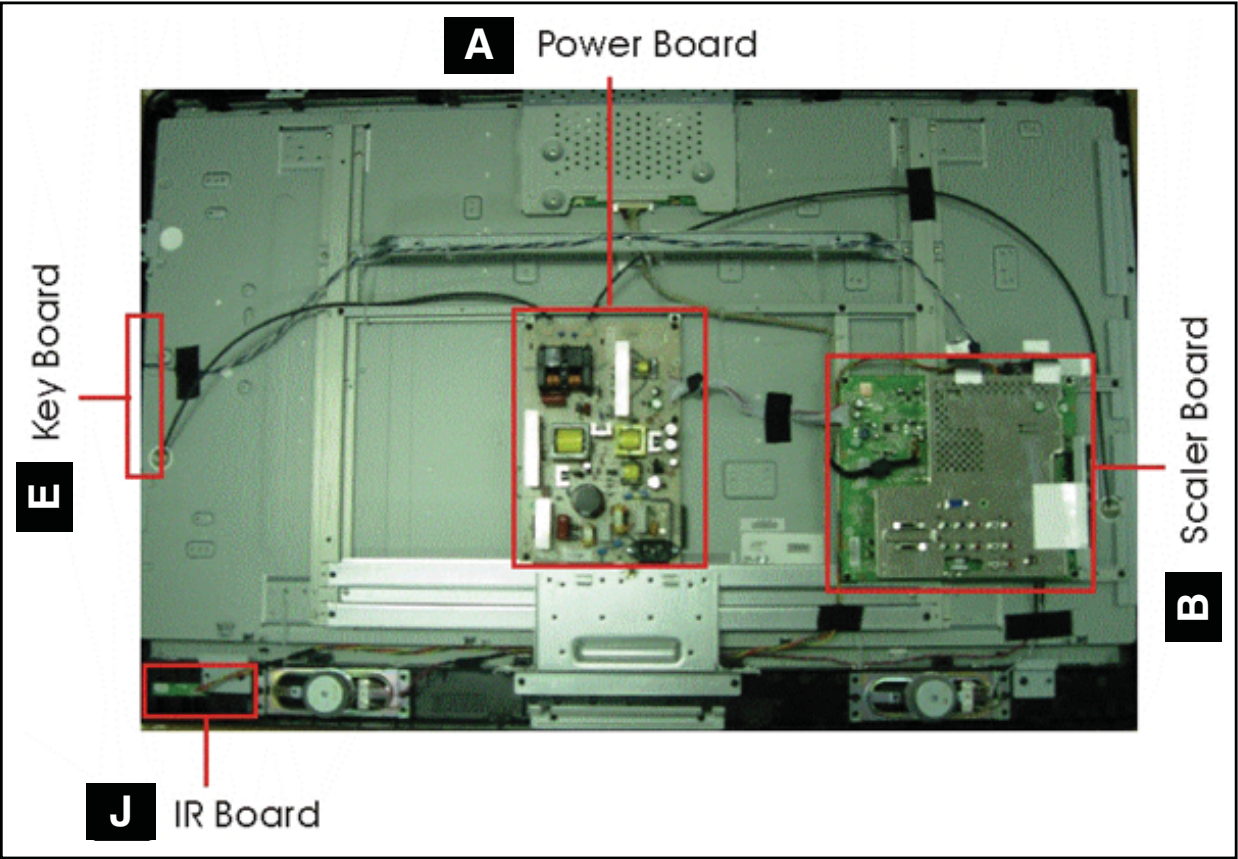
Cinch: Mono Speaker- Out

Bu	- Audio - Mono	0.5 V _{RMS} / 10 kohm	⊕
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Cinch: S/PDIF - Out

Bk	- Coaxial	0.4 - 0.6V _{PP} / 75 ohm	⊕
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1.3 Chassis Overview



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Figure 1-5 Chassis Overview


2. Safety Instructions, Warnings, and Notes

Index of this chapter:

- 2.1 Safety Instructions
- 2.2 Warnings
- 2.3 Notes

2.1 Safety Instructions


Safety regulations require the following **during** a repair:

- Connect the set to the Mains/AC Power via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol , only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that **after** a repair, the set must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the Mains/AC Power lead for external damage.
- Check the strain relief of the Mains/AC Power cord for proper function.
- Check the electrical DC resistance between the Mains/AC Power plug and the secondary side (only for sets that have a Mains/AC Power isolated power supply):
 1. Unplug the Mains/AC Power cord and connect a wire between the two pins of the Mains/AC Power plug.
 2. Set the Mains/AC Power switch to the "on" position (keep the Mains/AC Power cord unplugged!).
 3. Measure the resistance value between the pins of the Mains/AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 Mohm and 12 Mohm.
 4. Switch "off" the set, and remove the wire between the two pins of the Mains/AC Power plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings





- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ) . Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential. Available ESD protection equipment:
 - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
 - Wristband tester 4822 344 13999.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched "on".
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground (\perp), or hot ground (\rightarrow), depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the

Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).

- Where necessary, measure the waveforms and voltages with () and without () aerial signal. Measure the voltages in the power supply section both in normal operation () and in stand-by () . These values are indicated by means of the appropriate symbols.
- Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the "double-D symbol", are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads ($\mu = \times 10^{-6}$), nano-farads ($n = \times 10^{-9}$), or pico-farads ($p = \times 10^{-12}$).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 BGA (Ball Grid Array) ICs

Introduction

For more information on how to handle BGA devices, visit this URL: www.atyourservice.ce.philips.com (needs subscription, not available for all regions). After login, select "Magazine", then go to "Repair downloads". Here you will find Information on how to deal with BGA-ICs.

BGA Temperature Profiles

For BGA-ICs, you **must** use the correct temperature-profile, which is coupled to the 12NC. For an overview of these profiles, visit the website www.atyourservice.ce.philips.com (needs subscription, but is not available for all regions). You will find this and more technical information within the "Magazine", chapter "Repair downloads". For additional questions please contact your local repair help desk.

2.3.4 Lead-free Soldering

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
 - To reach a solder-tip temperature of at least 400°C.
 - To stabilize the adjusted temperature at the solder-tip.
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilized at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed.

To avoid wear-out of tips, switch "off" unused equipment or reduce heat.

- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly **to avoid** mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.

2.3.5 Alternative BOM identification

The **third digit** in the serial number (example: AG2B0335000001) indicates the number of the alternative B.O.M. (Bill Of Materials) that has been used for producing the specific TV set. In general, it is possible that the same TV model on the market is produced with e.g. two different types of displays, coming from two different suppliers. This will then result in sets which have the same CTN (Commercial Type Number; e.g. 28PW9515/12) but which have a different B.O.M. number.

By looking at the third digit of the serial number, one can identify which B.O.M. is used for the TV set he is working with. If the third digit of the serial number contains the number "1" (example: AG1B0335000001), then the TV set has been manufactured according to B.O.M. number 1. If the third digit is a "2" (example: AG2B0335000001), then the set has been produced according to B.O.M. no. 2. This is important for ordering the correct spare parts!

For the third digit, the numbers 1...9 and the characters A...Z can be used, so in total: 9 plus 26 = 35 different B.O.M.s can be indicated by the third digit of the serial number.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 1 and 2 refer to the production centre (e.g. BZ is Suzhou), digit 3 refers to the B.O.M. code, digit 4 refers to the Service version change code, digits 5 and 6 refer to the production year, and digits 7 and 8 refer to production week (in

example below it is 2008 week 10). The 6 last digits contain the serial number.



Figure 2-1 Serial number (example)

2.3.6 Board Level Repair (BLR) or Component Level Repair (CLR)

If a board is defective, consult your repair procedure to decide if the board has to be exchanged or if it should be repaired on component level.

If your repair procedure says the board should be exchanged completely, do not solder on the defective board. Otherwise, it cannot be returned to the O.E.M. supplier for back charging!

2.3.7 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages.** While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

3. Directions for Use

You can download this information from the following websites:

<http://www.philips.com/support>

<http://www.p4c.philips.com>

4. Mechanical Instructions

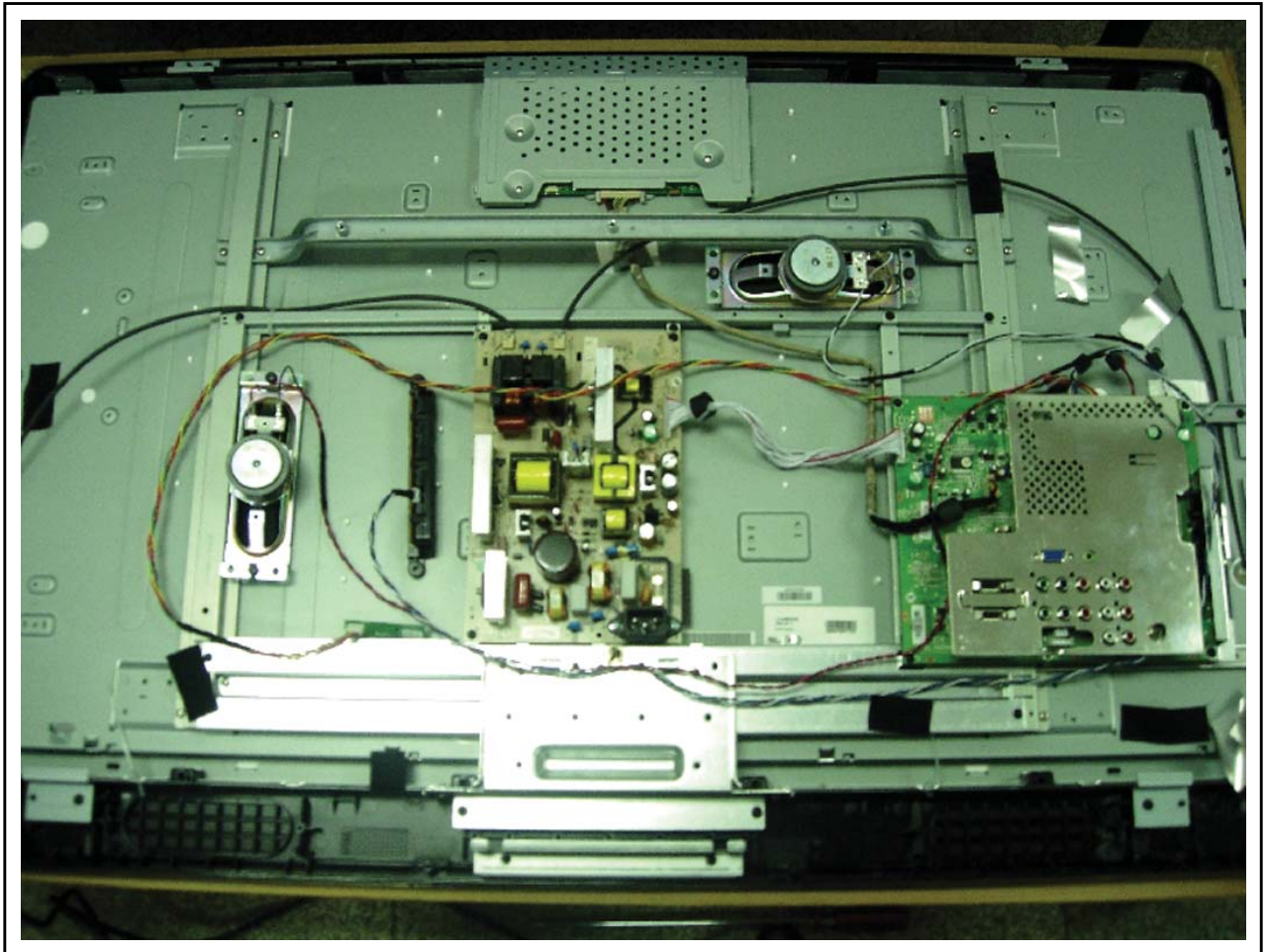
Index of this chapter:

- 4.1 Cable Dressing
- 4.2 Service Positions
- 4.3 Assy/Panel Removal
- 4.4 Set Re-assembly

Notes:

- Figures below can deviate slightly from the actual situation, due to the different set executions.
- Follow the disassemble instructions in described order. They apply to the 32" model, but the described method is comparable for the other screen sizes.

4.1 Cable Dressing



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Figure 4-1 Cable dressing (42" model)

4.2 Service Positions

For easy servicing of this set, there are a few possibilities created:

- The buffers from the packaging.
- The original aluminium stands.
- Foam bars (created for Service).

4.2.1 Foam Bars

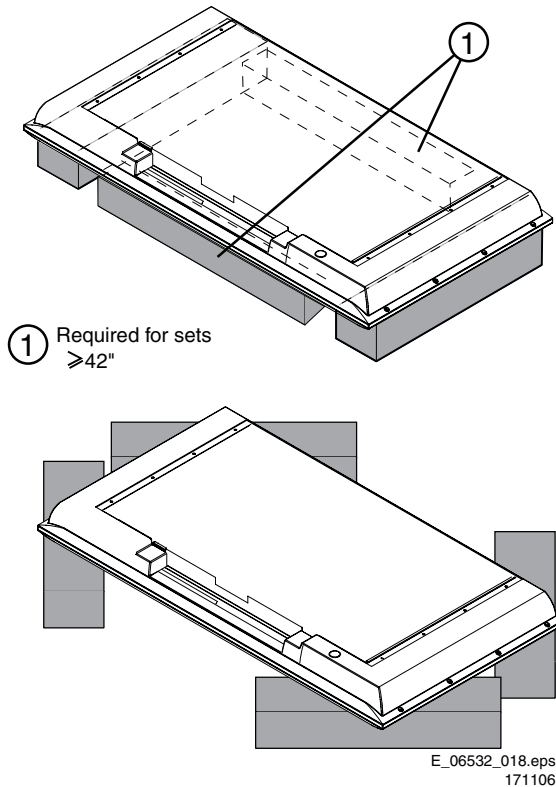


Figure 4-2 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs. See figure "Foam bars" for details. Sets with a display of 42" and larger, require **four** foam bars [1]. Ensure that the foam bars are always supporting the cabinet and **never** only the display. **Caution:** Failure to follow these guidelines can seriously damage the display!

By laying the TV face down on the (ESD protective) foam bars, a stable situation is created to perform measurements and alignments. By placing a mirror under the TV, you can monitor the screen.

4.3 Assy/Panel Removal

4.3.1 Rear Cover

Warning: Disconnect the mains power cord before you remove the rear cover.

1. Place the TV set upside down on a table top, using the foam bars (see part "Service Position").
2. Remove the screws that secure the rear cover and the stand (if mounted). The screws are located at the top, bottom, left and right sides.
3. Lift the rear cover from the cabinet. Make sure that wires and flat foils are not damaged during cover removal.

4.3.2 Keyboard Control Board

1. Refer to next figure.
2. Unscrew two screws [1]
3. Release clips [2].
4. Unplug connector [3] and remove the board.

When defective, replace the whole unit

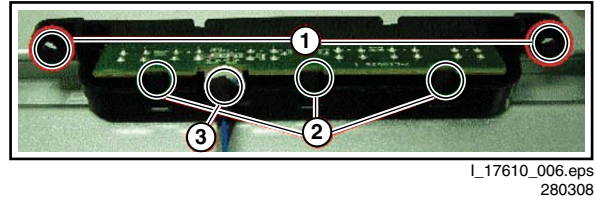


Figure 4-3 Keyboard control board

4.3.3 IR Board

1. Refer to next figure.
2. Unplug the connector [1].
3. Release clips [2] and remove the IR board.

When defective, replace the whole unit.

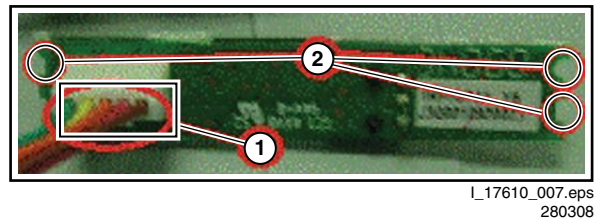


Figure 4-4 IR board

4.3.4 Speakers

1. Refer to next two figures.
2. Unplug the connectors [1].
3. Remove the screws [2].

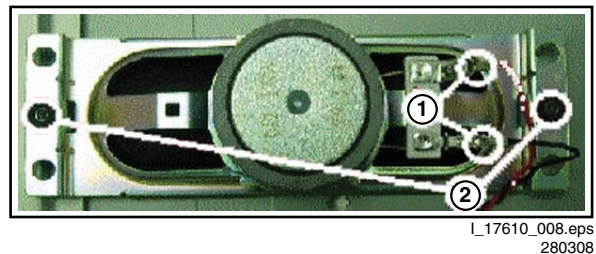


Figure 4-5 Speaker-1

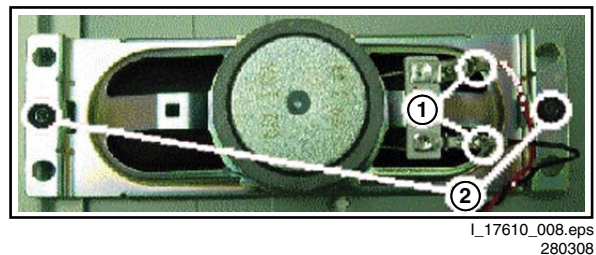
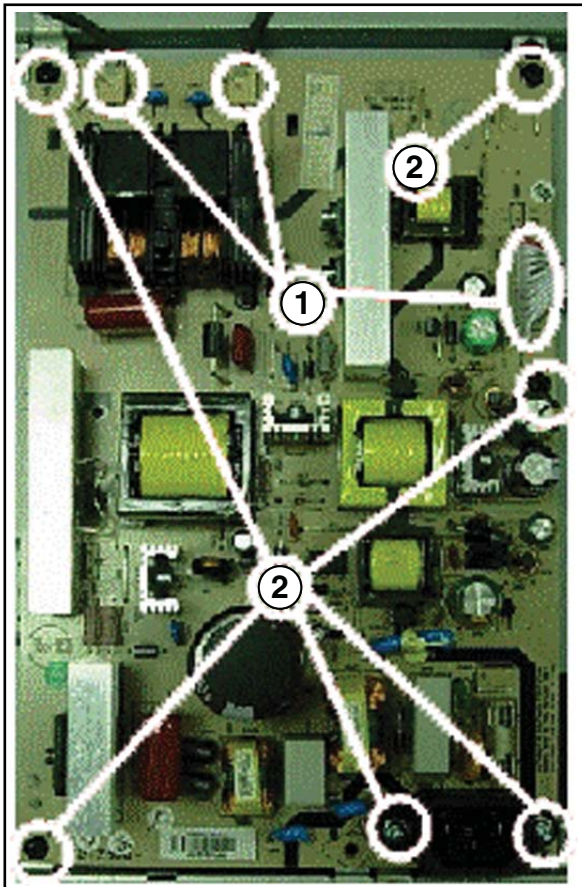


Figure 4-6 Speaker-2

4.3.5 Power Supply Board

1. Refer to next figure.
2. Unplug all the connectors [1].
3. Remove the fixation screws [2]
4. Remove the board.



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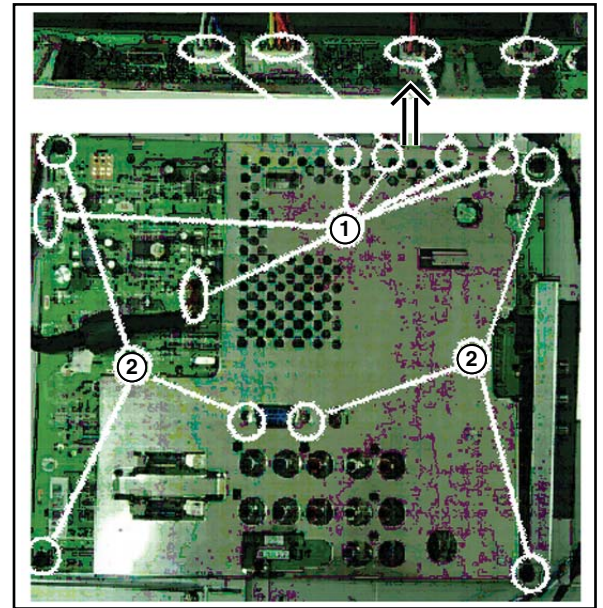
Figure 4-7 Power supply board

4.3.6 Scaler Board (SB)

Caution: it is absolutely mandatory to remount all different screws at their original position during re-assembly. Failure to do so may result in damaging the SB.

Removing the SB

1. See the figure "SB removal".
2. Unplug all of the cables [1].
3. Removed the parker screws [2].



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Figure 4-8 SB removal

4.4 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Notes:

- While re-assembling, make sure that all cables are placed and connected in their original position. See figure "Cable dressing".
- Pay special attention not to damage the EMC foams at the SB shields. Make sure, that EMC foams are put correctly on their places.

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

- 5.1 Test Points
- 5.2 Service Mode
- 5.3 Error Codes
- 5.4 Software Upgrading

5.1 Test Points

This chassis is NOT equipped with test points in the service printing. These test points are NOT specifically mentioned in the service manual.

5.2 Service Mode

5.2.1 Factory Mode or Service Alignment Mode (SAM)

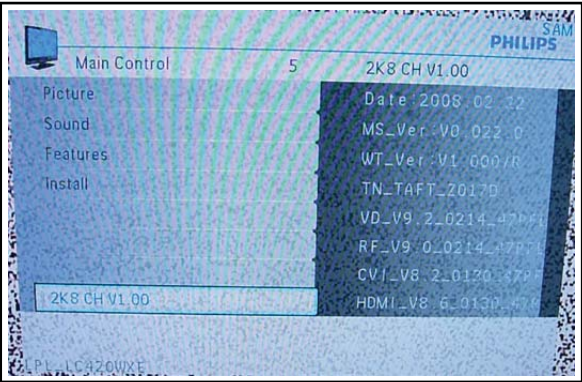
How to Enter

To enter the Factory mode, use the following method:

- Press on the remote control the code "062596" directly followed by the "DISPLAY/OUT" key.
- Press the "MENU" key and select "2K8 CH V1 00" to enter the "Factory" mode as shown in the next two pictures.

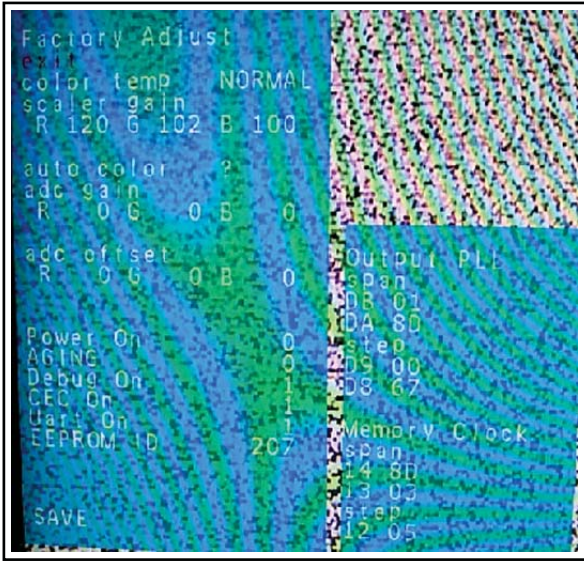
Caution: This function is available for development and service personnel only, not for end customers.

After entering the Factory mode, the following screen is visible, the values can be adjusted according to the requested (see Chapter 8).



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Figure 5-1 Factory mode menu (1)



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Figure 5-2 Factory mode menu 2)

How to EXIT

Choose "EXIT", then press the "MENU" button on the remote control.

5.2.2 Customer Service Mode (CSM)

Purpose

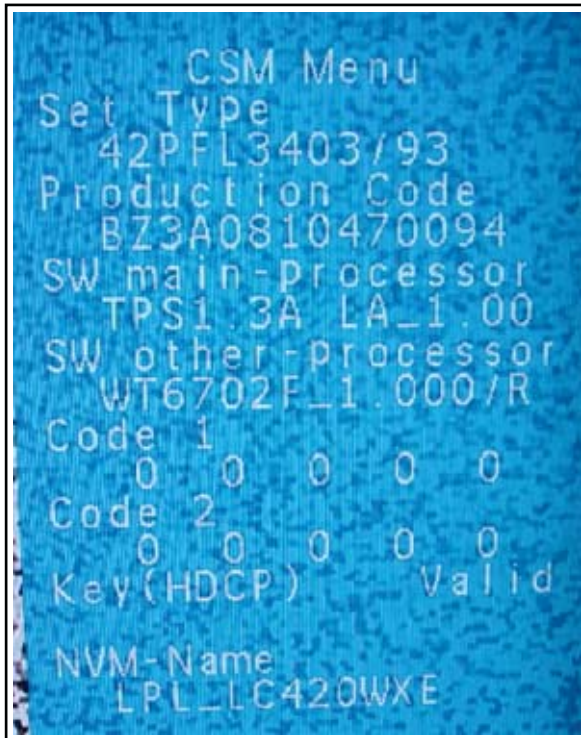
When a customer is having problems with his TV-set, he can call his dealer or the Customer Helpdesk. The service technician can then ask the customer to activate the CSM, in order to identify the status of the set. Now, the service technician can judge the severity of the complaint. In many cases, he can advise the customer how to solve the problem, or he can decide if it is necessary to visit the customer. The CSM is a read only mode; therefore, modifications in this mode are not possible.

How to Activate CSM

Key in the code "123654" via the standard RC transmitter.

How to Navigate

By mean of the "CURSOR-DOWN/UP" knob on the RC-transmitter on the screen.

Contents of CSML_17610_013.eps
280308**Figure 5-3 CSM Menu****Menu Explanation**

1. **Set Type.** Type number and region.
2. **Production code.** Product serial no.
3. **SW naming main-processor.** Software cluster and version is displayed.
4. **SW other-processor.** Not applicable.
5. **Code 1.** Error buffer contents.
6. **Code 2.** Error buffer contents.
7. **Key (HDCP):** Indicates if the HDCP-key are valid (HDMI).
8. **NVM-Name:** Indicates the used LCD panel type and region (NVM content and main SW depend on the used LCD panel).

How to exit

Press "MENU" on the RC-transmitter.

5.3 Error Codes

The error code buffer contains all errors detected since the last time the buffer was erased. The buffer is written from left to right. When an error occurs that is not yet in the error code buffer, it is displayed at the left side and all other errors shift one position to the right.

Basically there are five kind of errors:

Error code	Event
0x01	Audio Decode Error
0x02	IIC bus Error
0x03	Tuner Error
0x04	NVRAM Error
0x05	Scaler Chip Error

5.4 Software Upgrading

5.4.1 ComPair

Introduction

ComPair (Computer Aided Repair) is a Service tool for Philips Consumer Electronics products. and offers the following:

1. ComPair features TV software upgrade possibilities.
2. ComPair helps you to quickly get an understanding on how to repair the chassis in a short and effective way (this feature is not supported in this chassis).
3. ComPair allows very detailed diagnostics and is therefore capable of accurately indicating problem areas. You do not have to know anything about I2C or UART commands yourself, because ComPair takes care of this this feature is not supported in this chassis).
4. ComPair speeds up the repair time since it can automatically communicate with the chassis (when the uP is working) and all repair information is directly available (this feature is not supported in this chassis).

Specifications

ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The (new) ComPair II interface box is connected **to the PC** via an USB cable. For the TV chassis, the ComPair interface box and the TV communicate via a bi-directional cable via the service connector(s).

How to Connect

This is described in the ComPair chassis fault finding database.

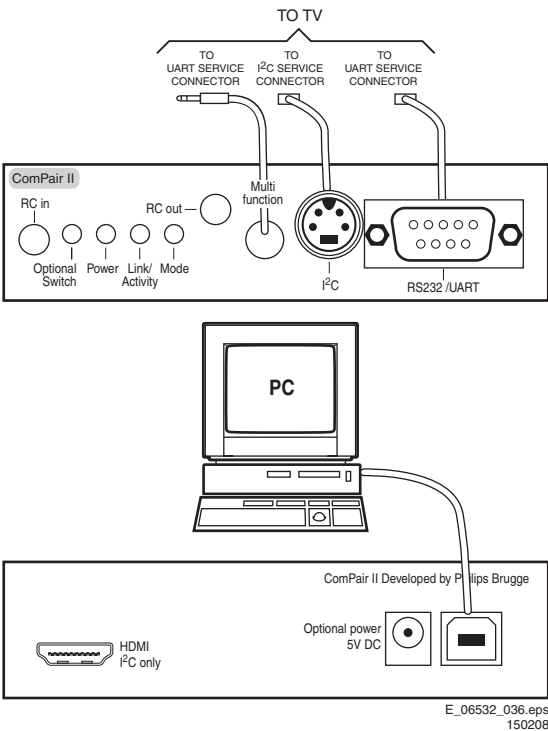


Figure 5-4 ComPair II interface connection

Caution: It is compulsory to connect the TV to the PC as shown in the picture above (with the ComPair interface in between), as the ComPair interface acts as a level shifter. If one connects the TV directly to the PC (via UART), ICs will be blown!

How to Order

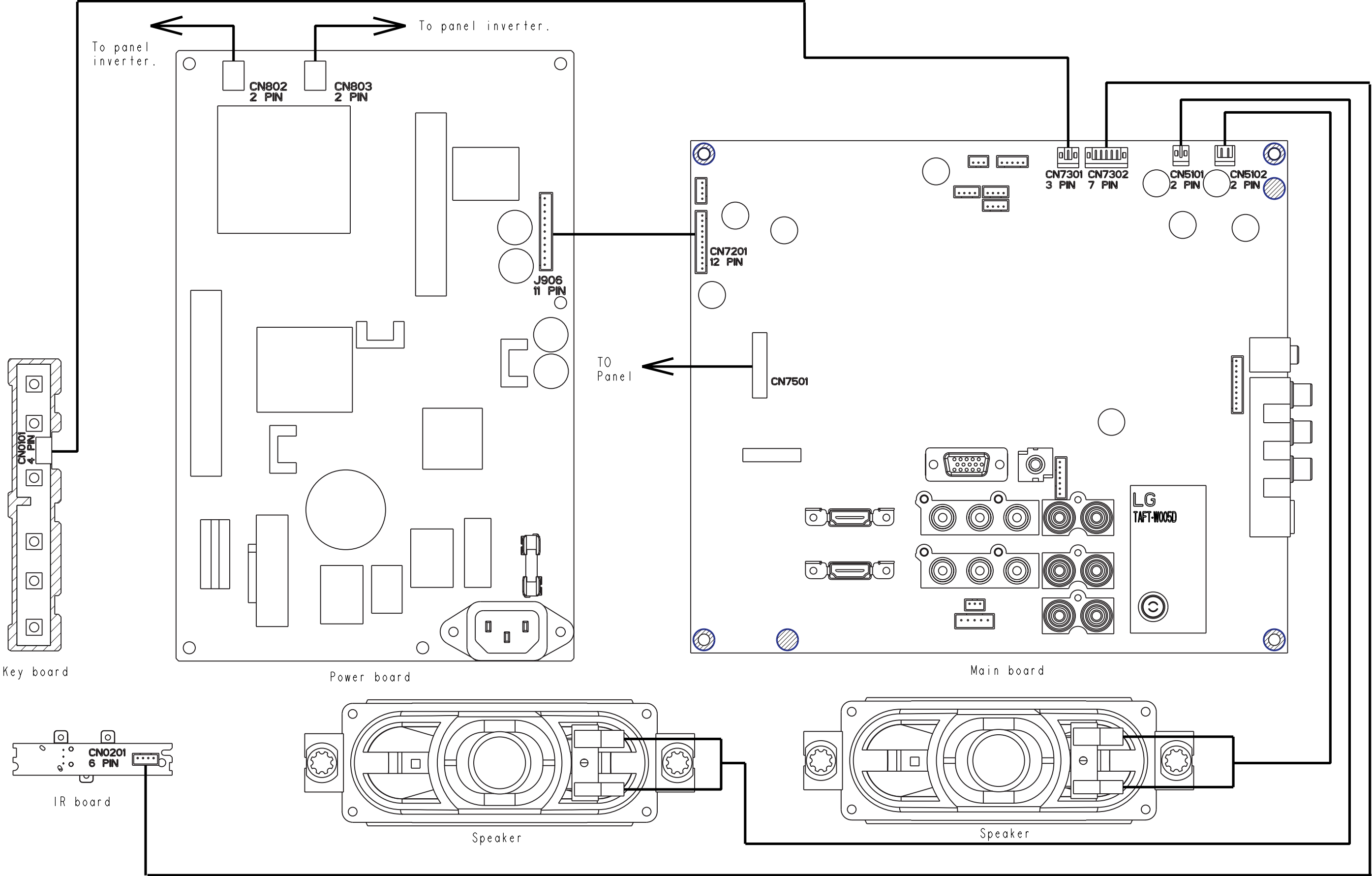
ComPair II order codes:

- ComPair II interface: 312278591020.
- For SW see Philips service website.
- ComPair I2C interface cable: 312278590004 or 312278590630.

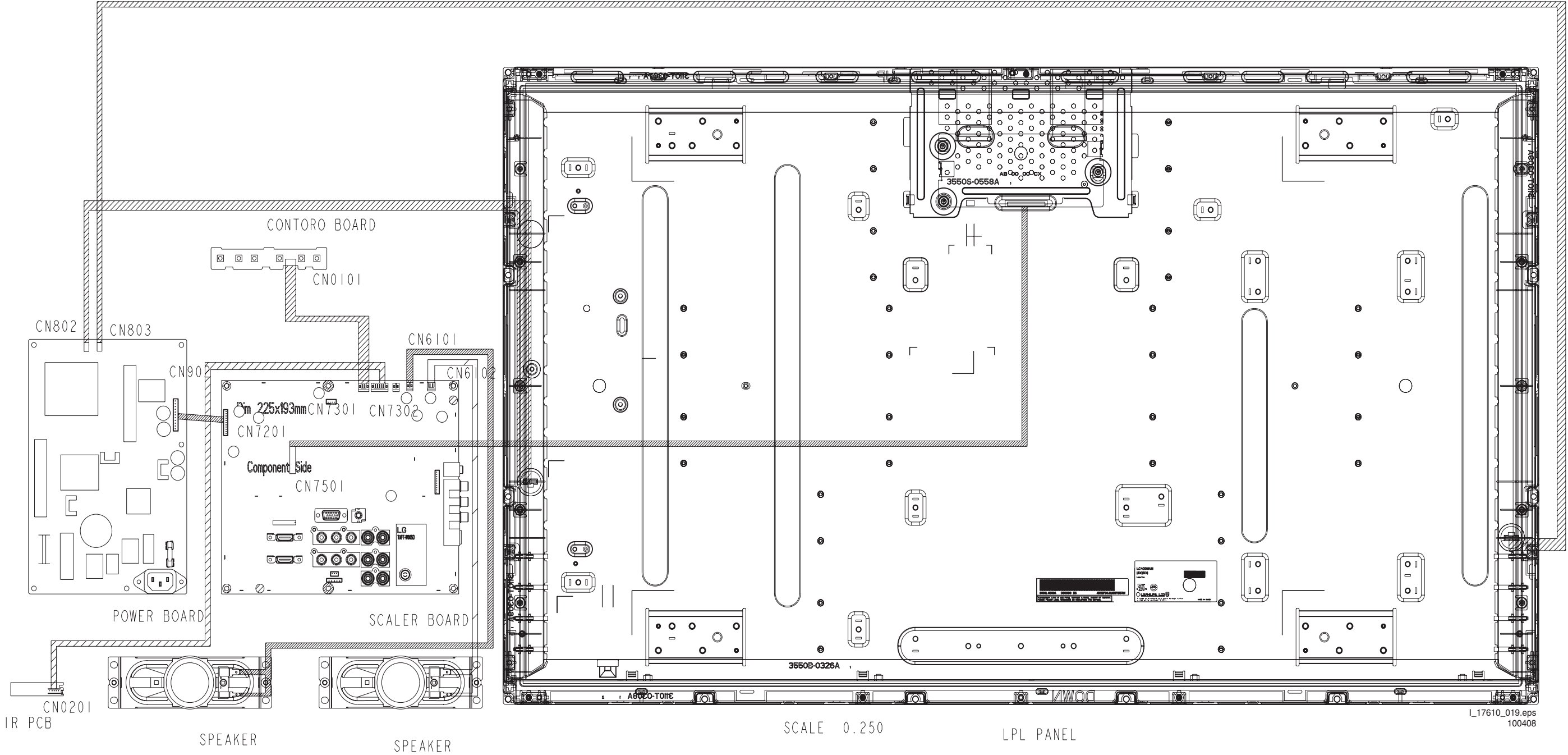
Note: If you encounter any problems, contact your local support desk.

6. Block Diagrams, Test Point Overviews, and Waveforms

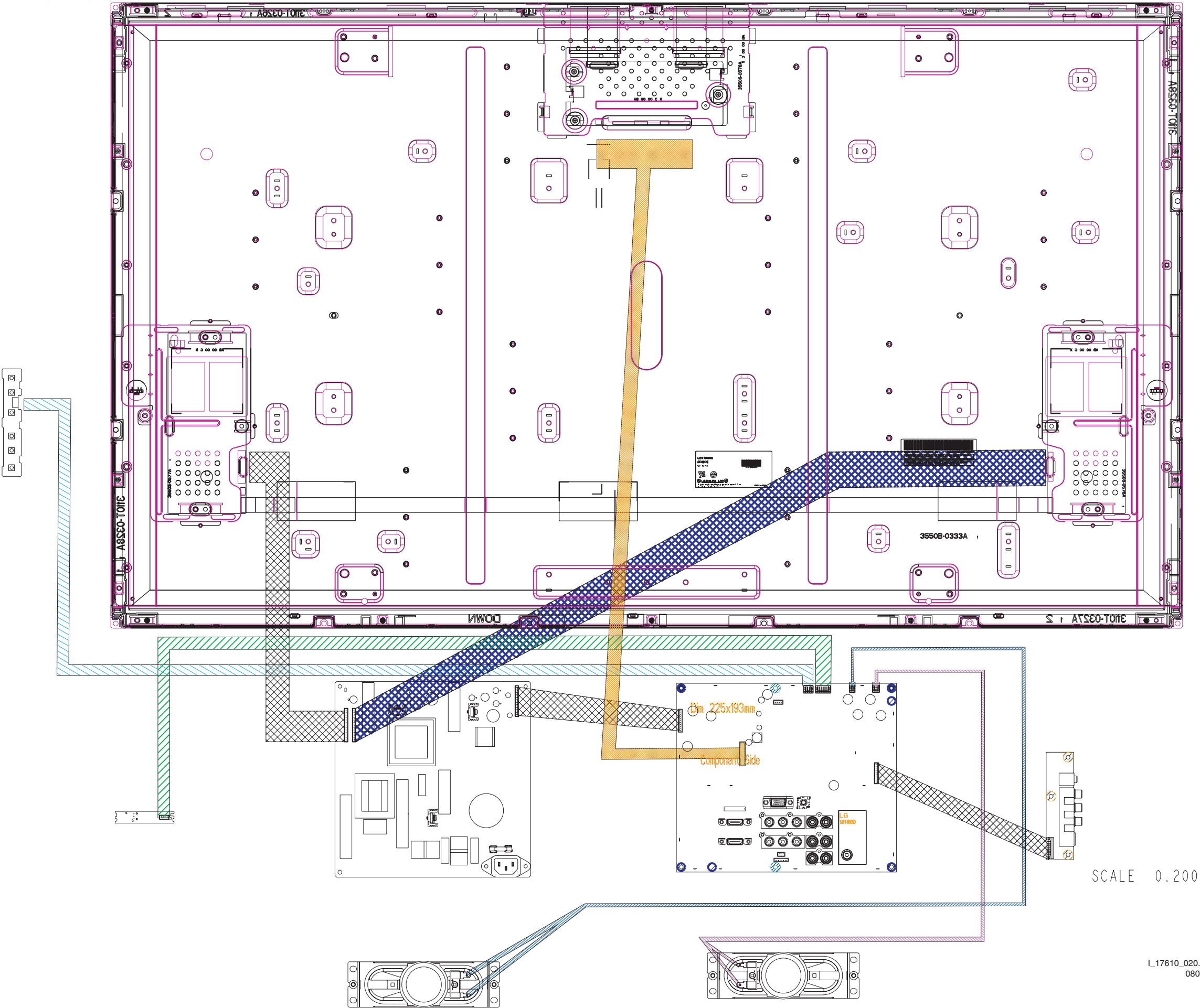
Wiring Diagram (37")
WIRING DIAGRAM 37"



Wiring Diagram (42")
Wiring Diagram (42")

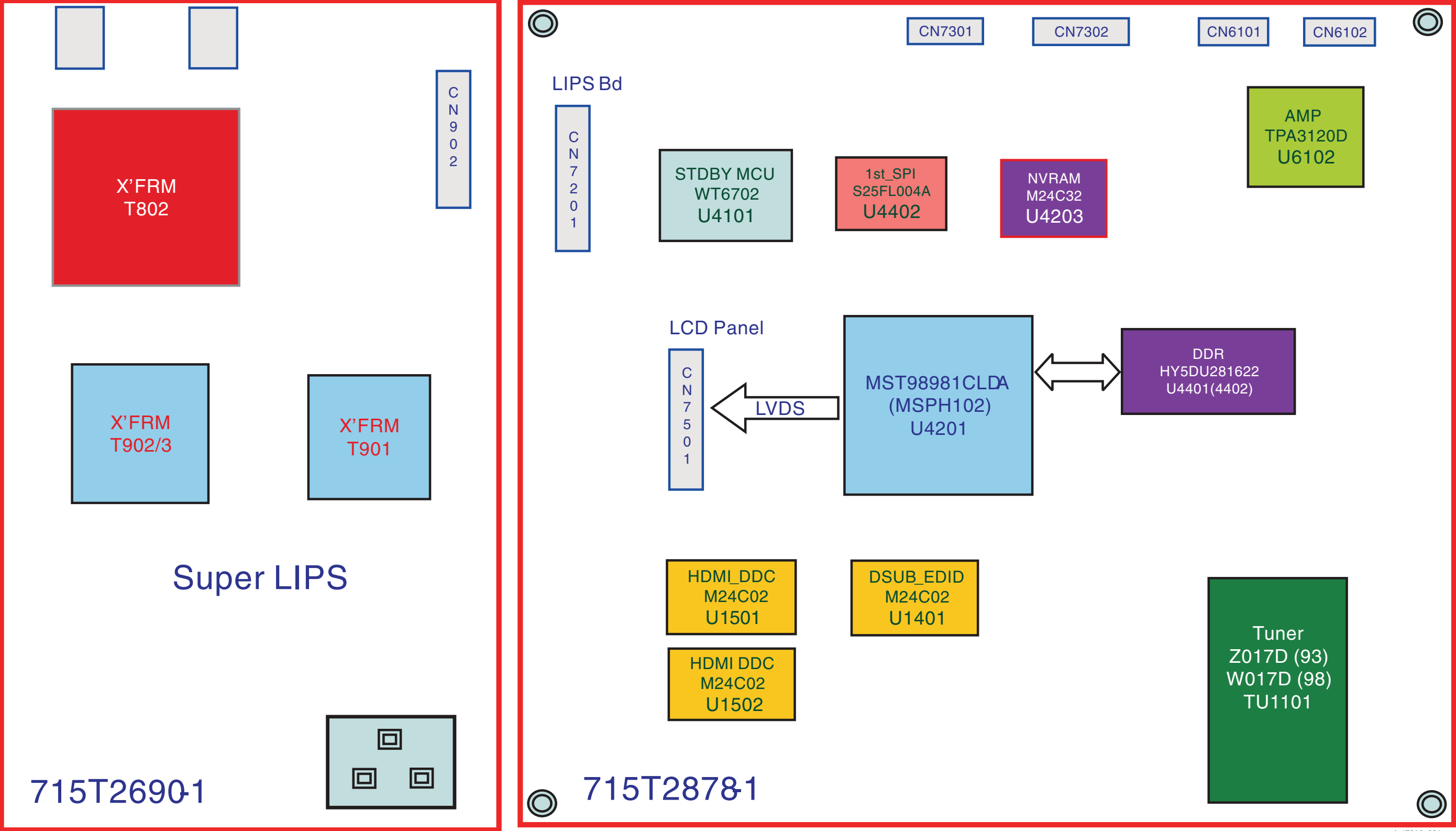


Wiring Diagram (47")
Wiring Diagram (47")



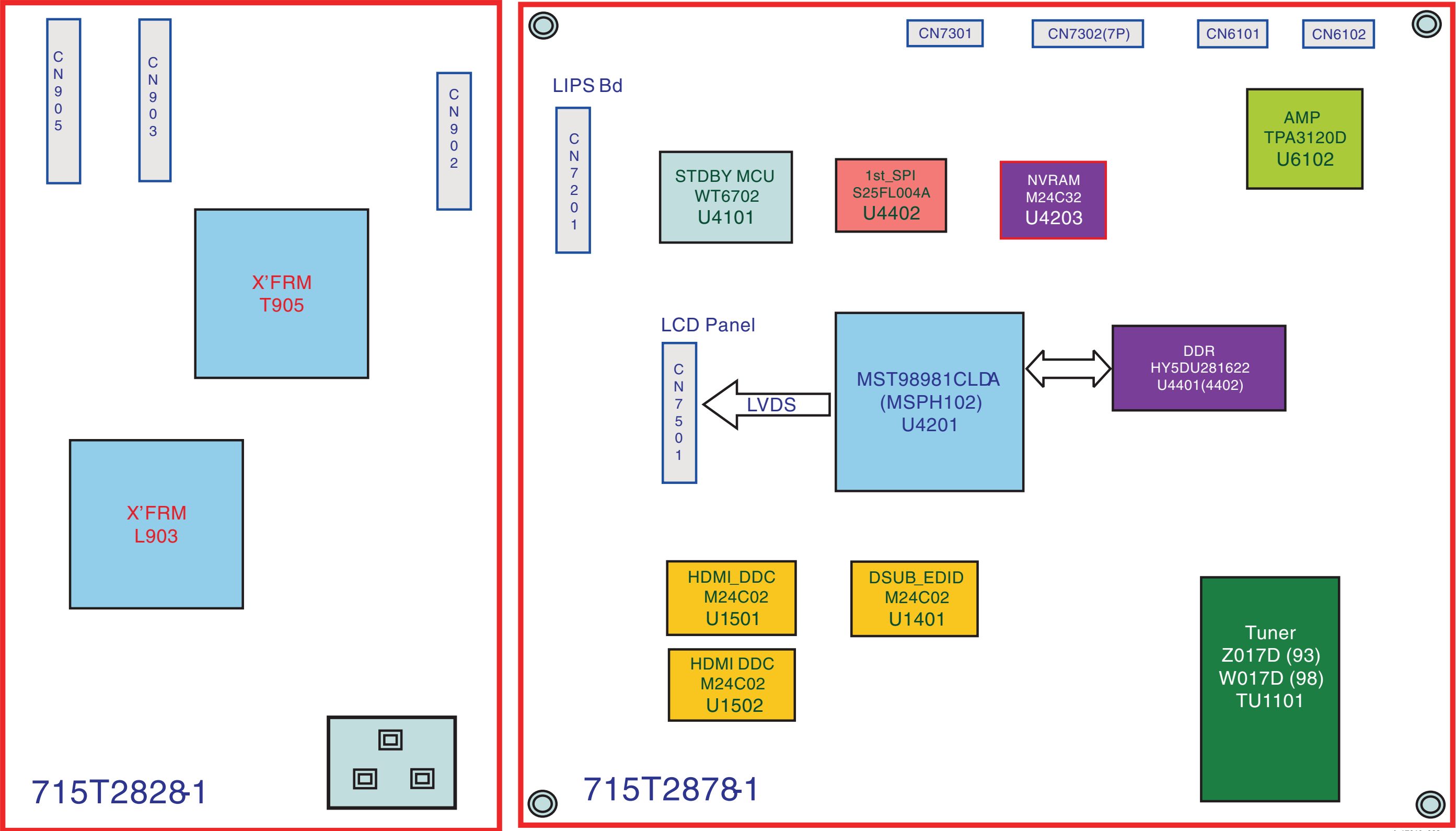
Block Diagram Internal System (42")

42PFL3403 Internal System Block Diagram



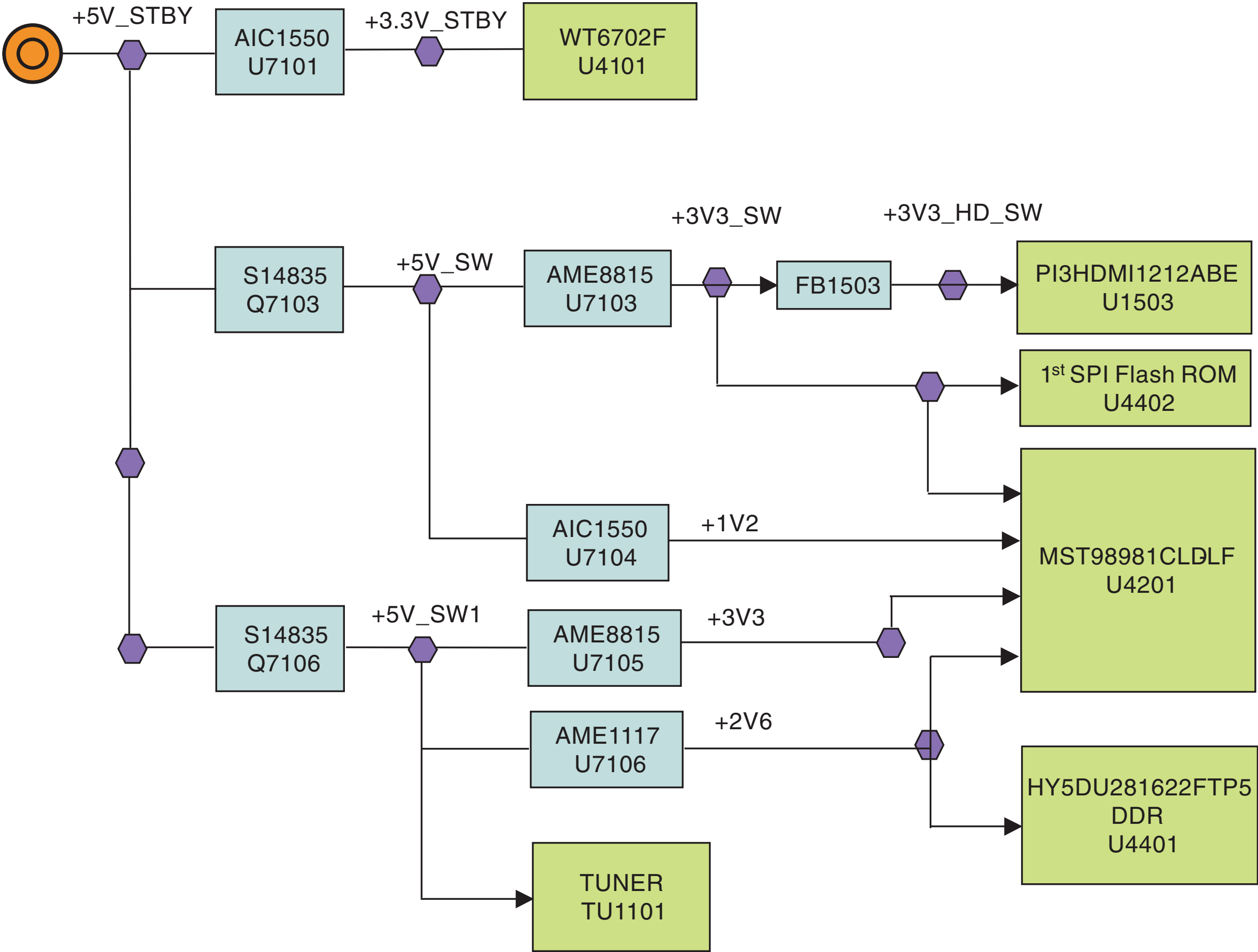
Block Diagram Internal System (47")

47PFL3403 Internal System Block Diagram



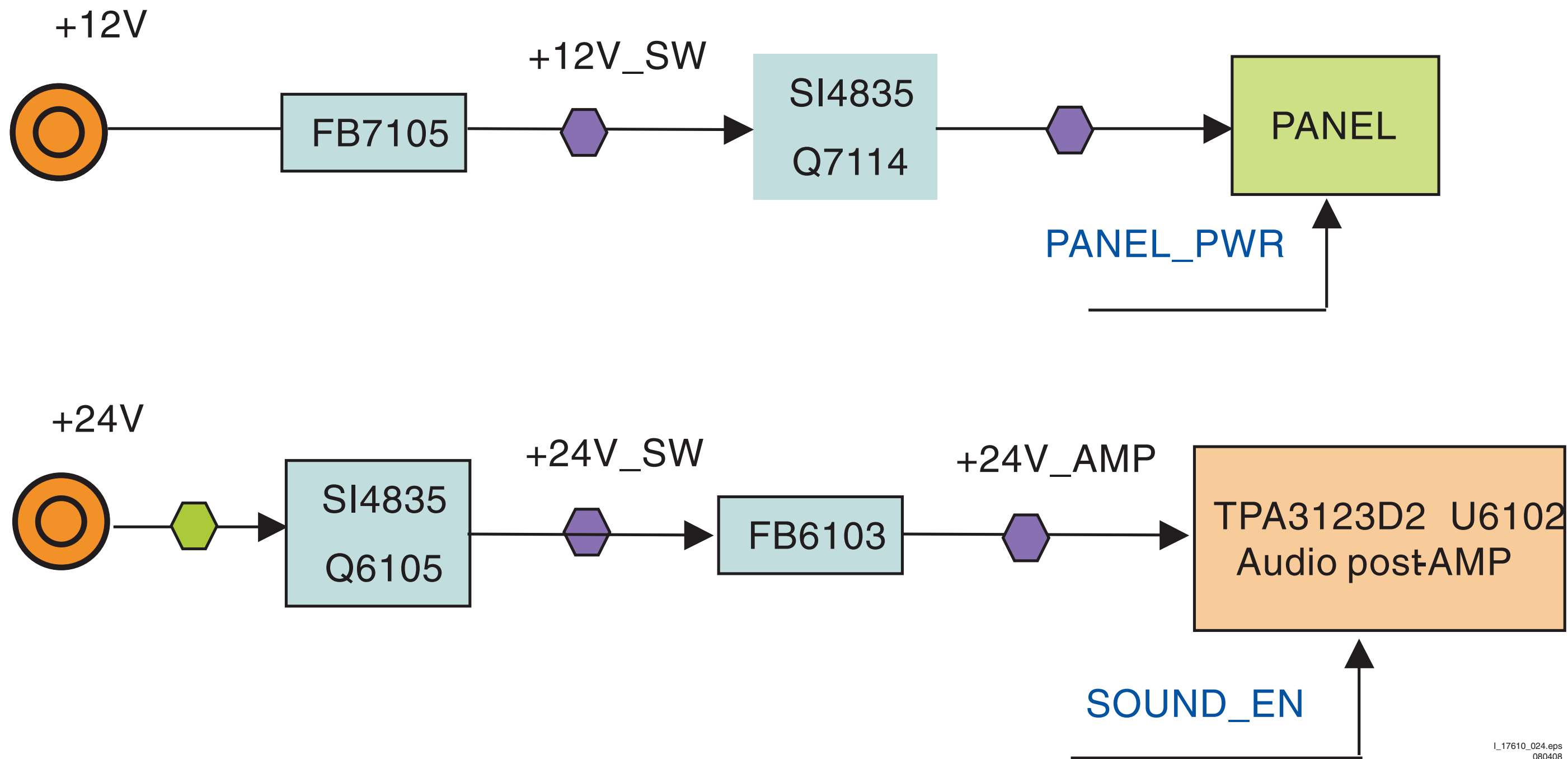
Block Diagram Power Management (1)

POWER MANAGEMENT (1)



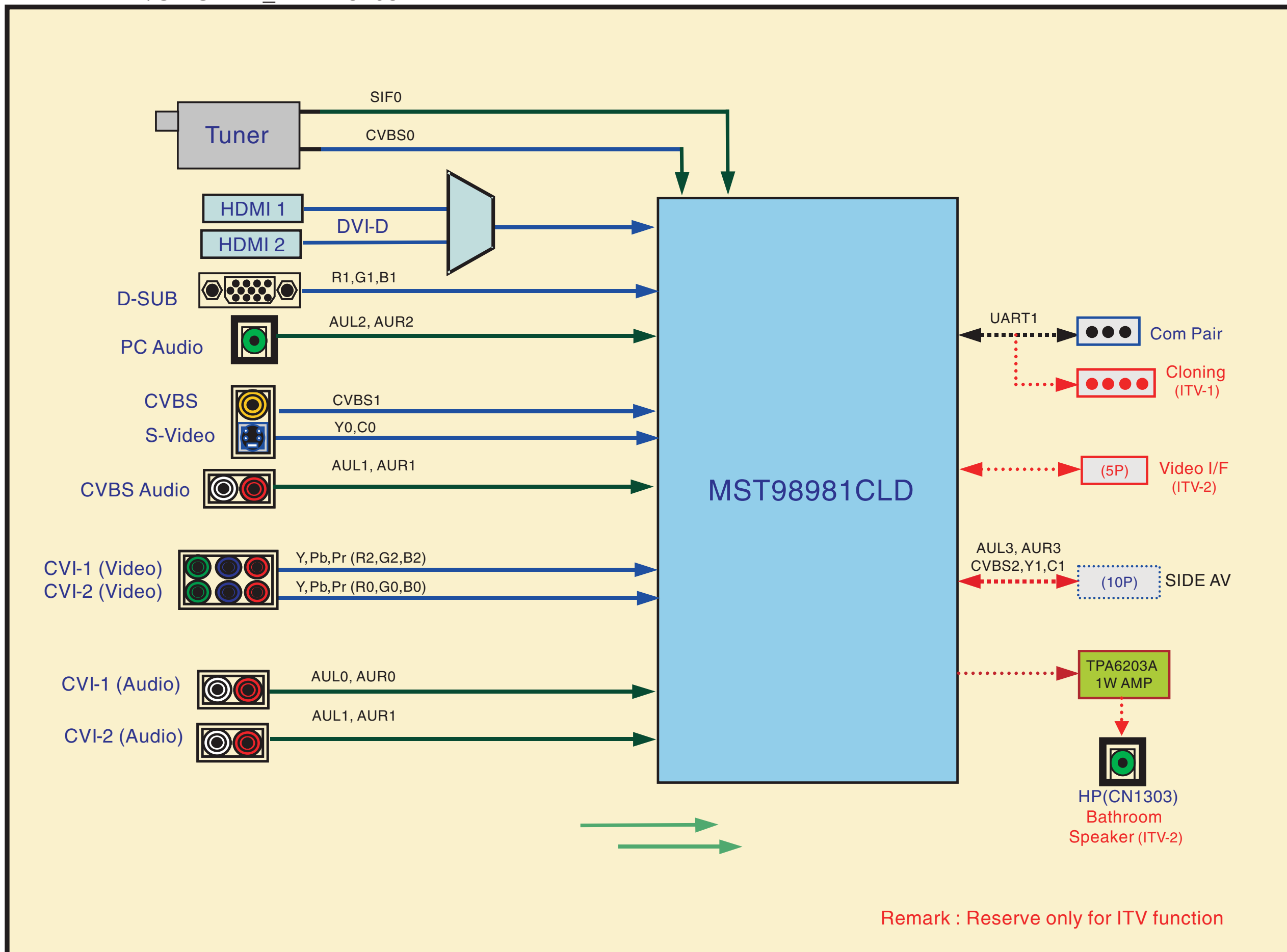
Block Diagram Power Management (2)

POWER MANAGEMENT (2)



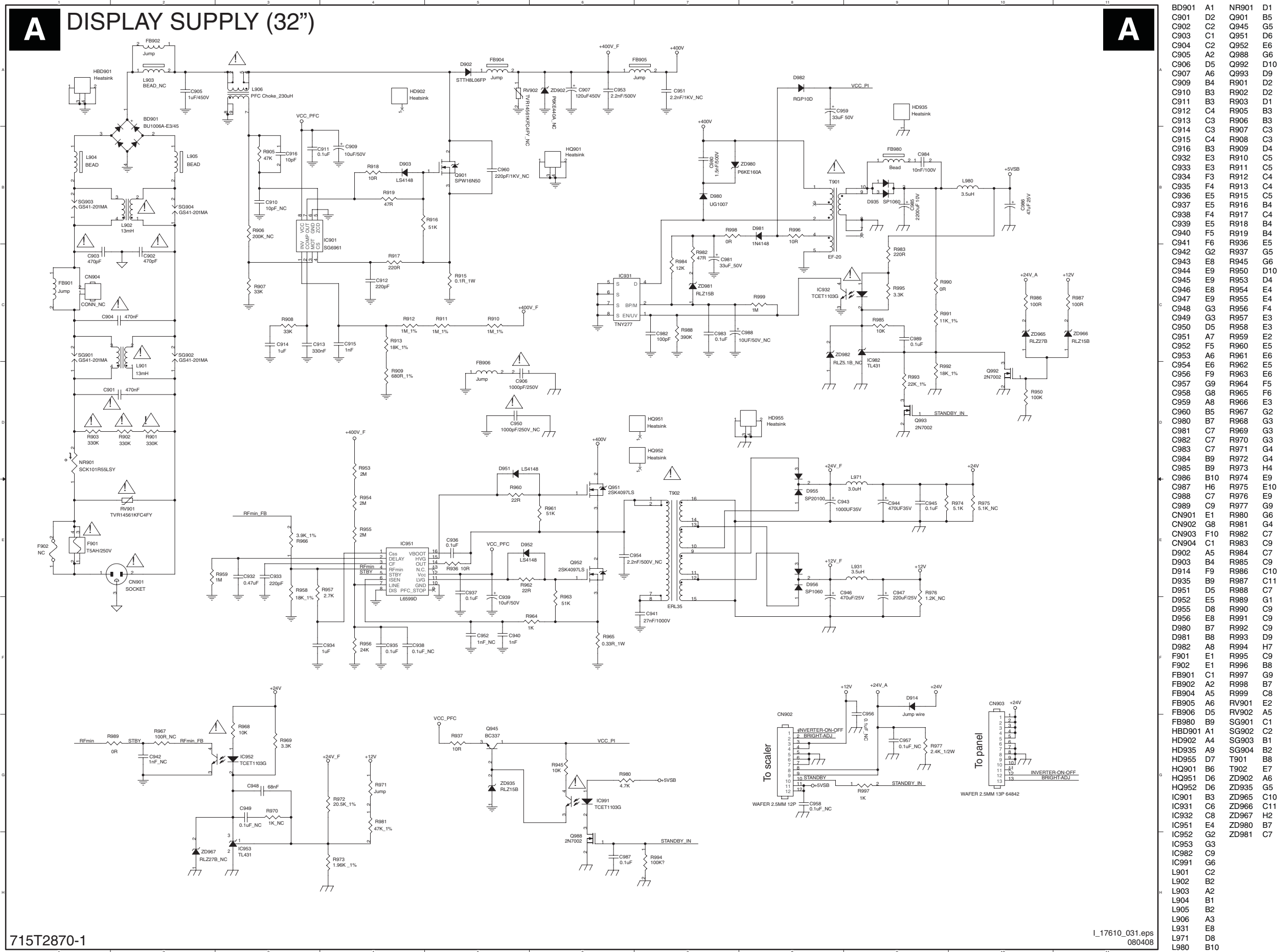
External I/O (42" - 47")

EXTERNAL I/O FOR 42_47PFL3403



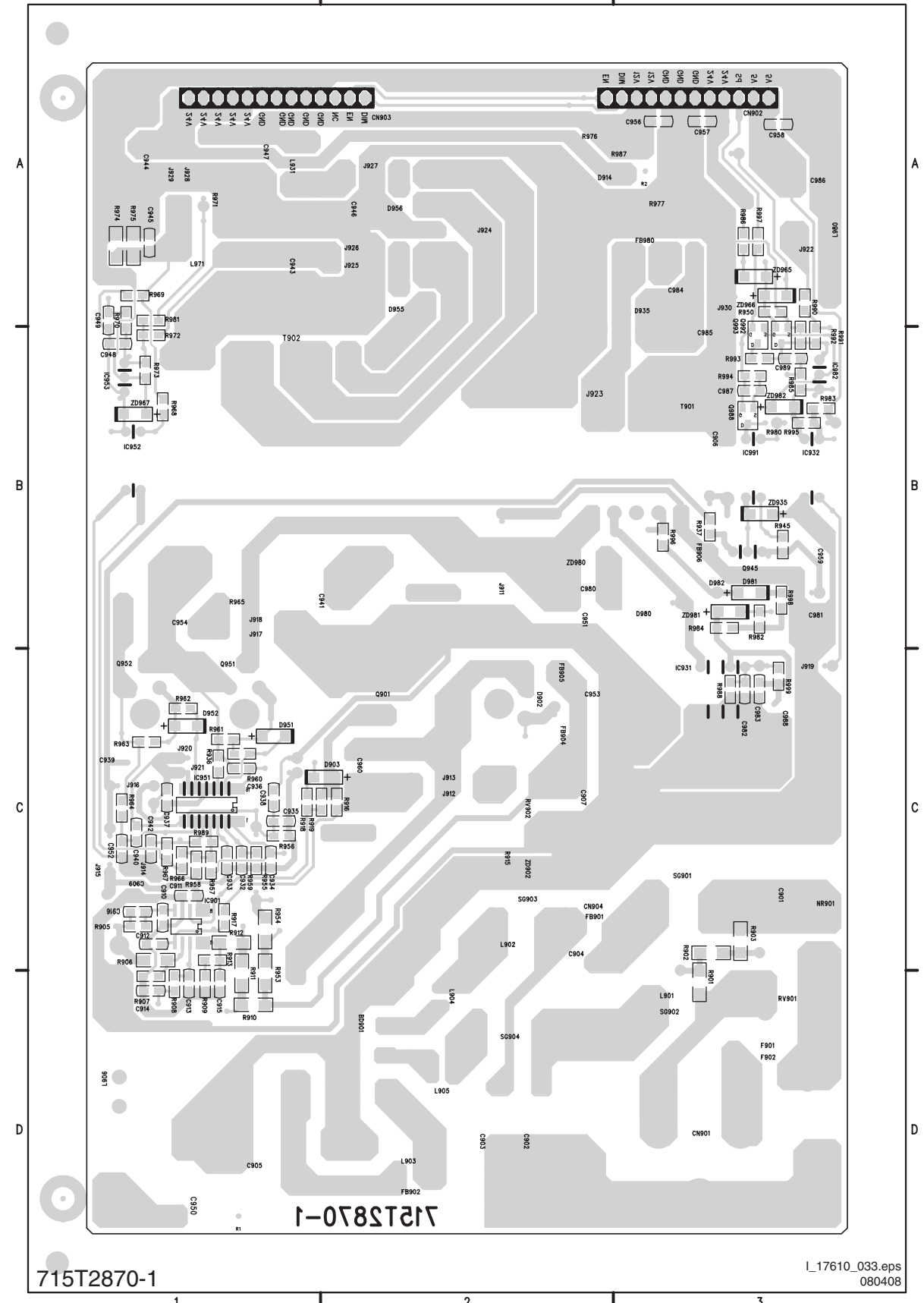
7. Circuit Diagrams and PWB Layouts

Display Supply (32")



Layout Display Supply Panel (32") (Bottom Side)

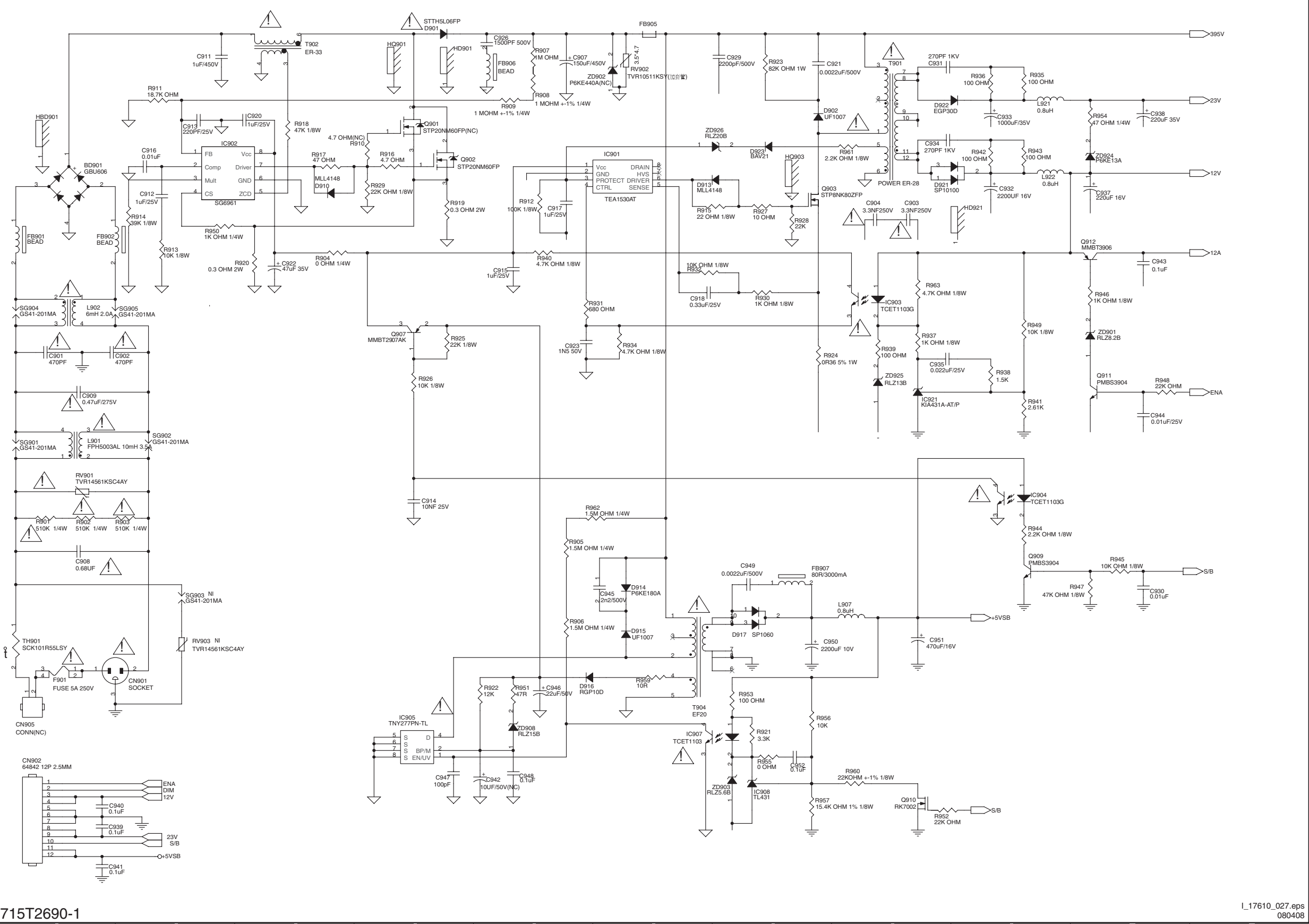
C910	C1	C936	C1	C958	A3	Q988	B3	R910	D1	R950	A3	R964	C1	R982	B3	R994	A3	ZD982 A3
C911	C1	C937	C1	C982	B3	Q992	A3	R911	C1	R953	C1	R966	C1	R983	A3	R995	B3	
C912	C1	C938	C1	C983	B3	Q993	A3	R912	C1	R954	C1	R967	C1	R984	B3	R996	B3	
C913	C1	C940	C1	C987	A3	R901	C3	R913	C1	R956	C1	R968	A1	R985	A3	R997	A3	
C914	C1	C942	C1	C989	A3	R902	C3	R916	C2	R957	C1	R969	A1	R986	A3	R998	B3	
C915	C1	C945	A1	D903	C2	R903	C3	R917	C1	R958	C1	R970	A1	R988	B3	R999	B3	
C916	C1	C948	A1	D951	C1	R905	C1	R918	C2	R959	C1	R972	A1	R989	C1	ZD935 B3		
C932	C1	C949	A1	D952	C1	R906	C1	R919	C2	R960	C1	R973	A1	R990	A3	ZD965 A3		
C933	C1	C952	C1	D981	B3	R907	C1	R936	C1	R961	C1	R974	A1	R991	A3	ZD966 A3		
C934	C1	C956	A3	IC901	C1	R908	C1	R937	B3	R962	C1	R975	A1	R992	A3	ZD967 A1		
C935	C1	C957	A3	IC951	C1	R909	C1	R945	B3	R963	C1	R981	A1	R993	A3	ZD981 B3		
			1				1			2			1			3		



Display Supply (37"-42") (Part 1)

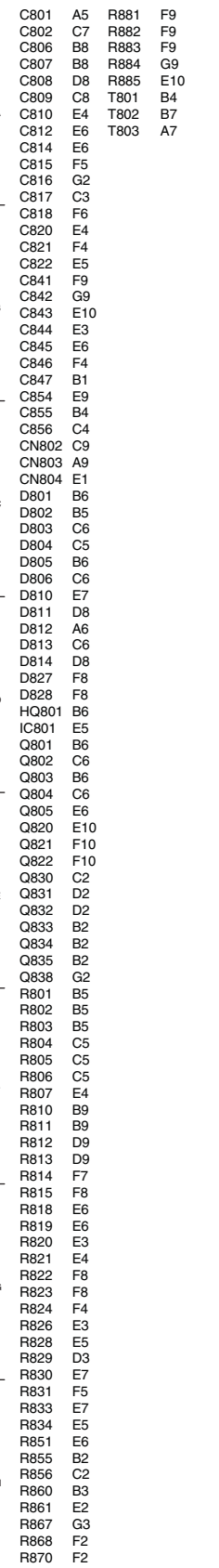
A1 DISPLAY SUPPLY (37"-42") (PART 1)

A1



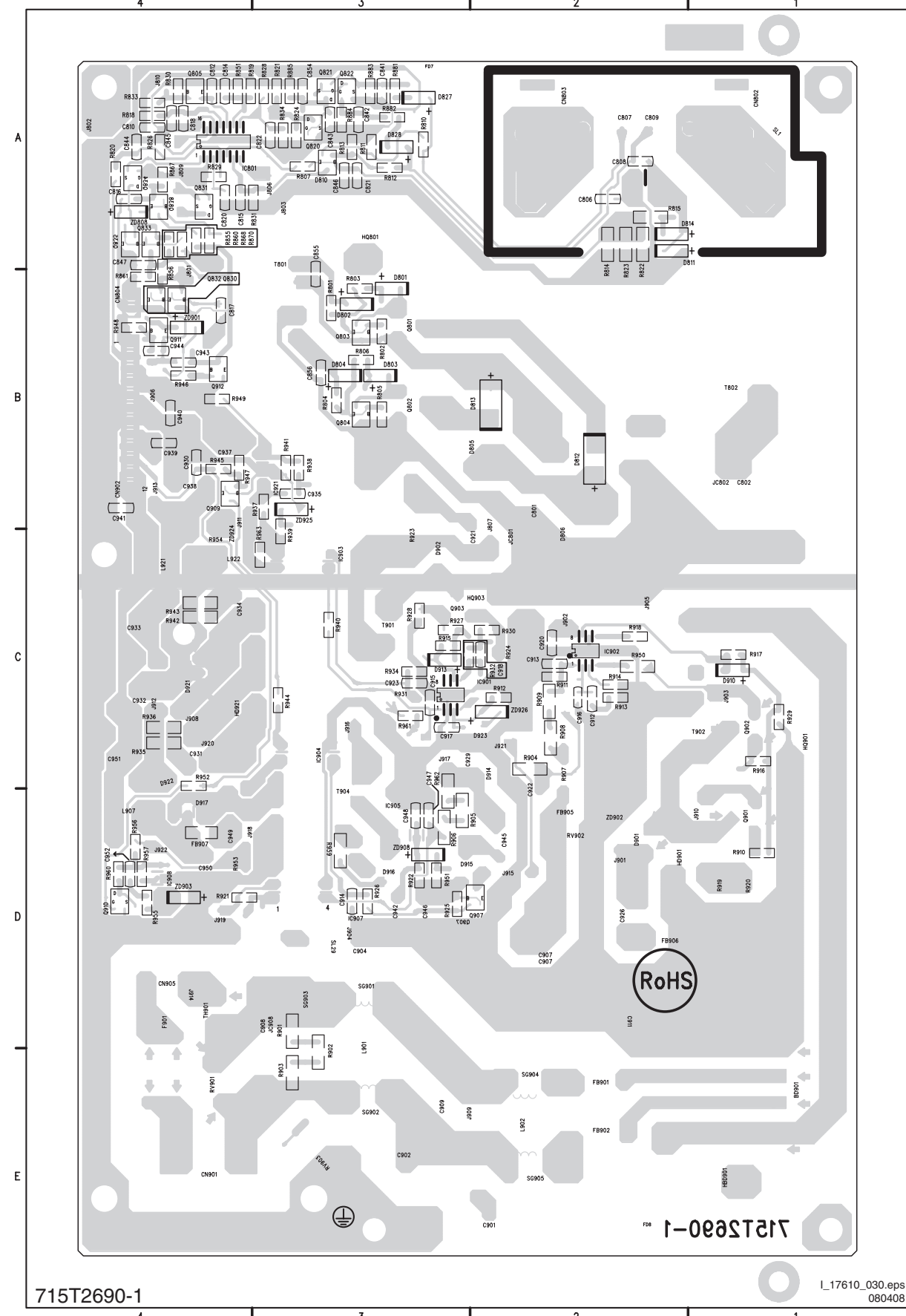
BD901	B1	R911	B2
C901	D1	R912	C5
C902	D1	R913	C2
C903	C8	R914	C2
C904	C8	R915	C6
C907	A5	R916	B4
C908	E1	R917	B3
C909	D1	R918	B3
C911	A2	R919	C4
C912	C2	R920	C3
C913	B2	R921	G7
C914	E4	R922	F4
C915	C5	R923	A7
C916	B2	R924	D7
C917	C5	R925	D4
C918	C6	R926	D4
C920	B3	R927	C7
C921	A7	R928	C7
C922	C3	R929	B4
C923	D5	R930	C7
C926	A5	R931	C5
C929	A6	R932	C6
C930	F10	R934	D6
C931	A8	R935	B9
C932	B9	R936	B9
C933	B9	R937	D8
C934	B8	R938	D9
C935	D8	R939	D8
C937	B10	R940	C5
C938	B10	R941	D9
C939	H1	R942	B9
C940	G1	R943	B9
C941	H1	R944	E9
C942	G4	R945	F10
C943	C10	R946	C10
C944	D10	R947	F10
C945	F5	R948	D10
C946	F5	R949	D9
C947	G4	R950	C2
C948	F5	R951	F5
C949	F7	R952	G8
C950	F7	R953	G7
C951	F8	R954	B10
C952	G7	R955	G7
CN901	F1	R956	G7
CN902	G1	R957	F6
CN905	G1	R959	G7
D901	A4	R960	G8
D902	B7	R961	B7
D910	B3	R962	E5
D913	B6	R963	C8
D914	F6	RV901	E1
D915	F6	RV902	A6
D916	F5	RV903	F2
D917	F7	SG901	E1
D921	B8	SG902	E2
D922	B8	SG903	F2
D923	B7	SG904	C1
F901	C1	SG905	C1
FB901	C1	T901	A8
FB902	C1	T902	A3
FB905	A6	T904	F6
FB906	A5	TH901	F1
FB907	F7	ZD901	D10
HBD901	B1	ZD902	A6
HD901	A4	ZD903	G7
HD921	C8	ZD908	G5
HQ901	A4	ZD924	B10
HQ903	B7	ZD925	D8
IC901	B5	ZD926	B6
IC902	B2		
IC903	C8		
IC904	E9		
IC905	G4		
IC907	G6		
IC908	G7		
IC921	D8		
L901	D1		
L902	C1		
L907	F7		
L921	B9		
L922	B9		
Q901	B4		
Q902	B4		
Q903	C7		
Q907	D4		
Q909	F9		
Q910	G8		
Q911	D10		
Q912	C10		
R901	E1		
R902	E1		
R903	E1		
R904	C3		
R905	E5		
R906	F5		
R907	A5		
R908	B5		
R909	B5		
R910	B4		

A2 POWER SUPPLY (37"-42") (PART 2)

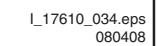


Layout Display Supply Panel (37"-42") (Bottom Side)

G806	A2	C818	A4	C845	A4	C914	D3	C935	B4	C952	D4	D813	B3	IC901	C3	Q830	A4	Q909	B4	R805	B3
C808	A2	C820	A4	C846	A3	C915	C3	C939	B4	D801	A3	D814	A2	IC902	C2	Q831	A4	Q910	D4	R806	B3
C810	A4	C821	A3	C847	A4	C916	C2	C940	B4	D802	A3	D827	A3	Q803	A3	Q832	A4	Q911	A4	R807	A4
C812	A4	C822	A4	C854	A4	C917	C3	C941	B4	D803	B3	D828	A3	Q804	B3	Q833	A4	Q912	B4	R810	A3
C814	A4	C841	A3	C855	A4	C918	C3	C943	B4	D804	B3	D910	C1	Q805	A4	Q834	A4	R801	A3	R811	A3
C815	A4	C842	A3	C856	B4	C920	C2	C944	A4	D810	A3	D913	C3	Q820	A4	Q835	A4	R802	A3	R812	A3
C816	A4	C843	A3	C912	C2	C923	C3	C947	C3	D811	A2	FB907	D4	Q821	A3	Q838	A4	R803	A3	R813	A3
C817	A4	C844	A4	C913	C2	C930	B4	C948	C3	D812	B2	IC801	A4	Q822	A3	Q907	D3	R804	B3	R814	A2

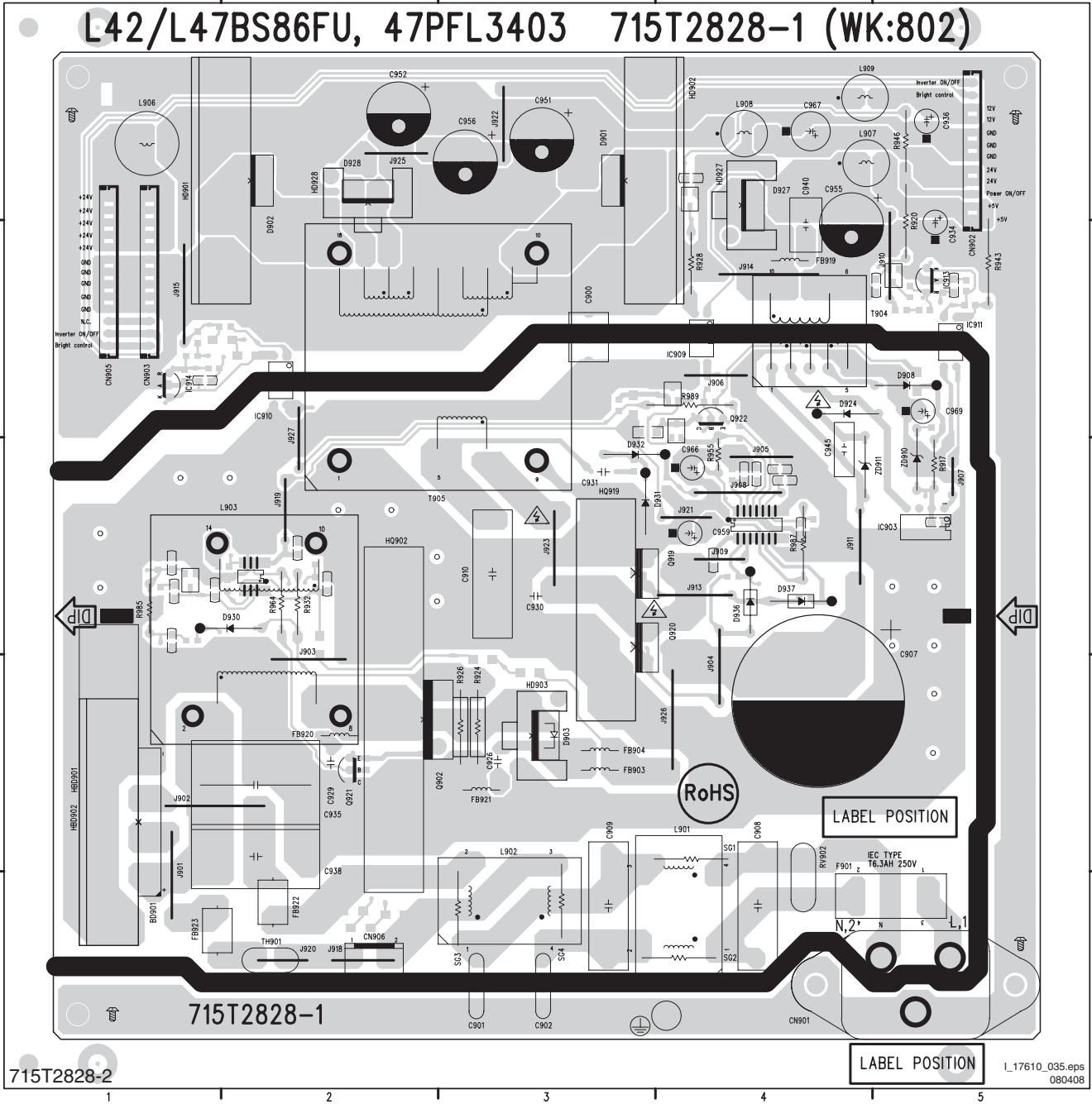


BD901	A4	C910	C7	C922	B10	C929	C6	C937	E8	C952	C9	C969	G7	D902	C8	D931	E6	FB919	F8	HD902	D8	IC902	C3	L901	B2	L964	C4	Q920	B7	R916	D8	R928	E8	R939	B10	R947	G9	R957	D6
C900	B8	C912	D3	C923	B6	C930	C7	C939	G6	C955	F9	CN901	A1	D903	B6	D932	E6	FB920	C6	HD903	B5	IC903	G5	L902	B3	Q902	C5	Q921	C5	R917	G6	R929	C5	R940	B10	R949	G8	R958	E4
C901	B3	C913	C3	C924	G9	C931	E6	C940	F8	C956	C9	CN902	D1	D908	F7	D936	C6	FB921	B6	HD927	F8	IC909	E8	L903	B5	Q915	E8	Q922	D8	R918	C4	R930	D6	R941	G9	R952	C5	R959	B4
C902	B3	C915	D3	C925	E4	C932	E5	C941	G7	C959	E6	CN903	E1	D924	F6	D937	D6	FB922	A4	HD928	C8	IC910	D9	L906	C10	Q916	D3	Q923	D5	R919	G8	R932	D4	R943	F8	R953	C6	R960	B4
C907	B6	C916	D3	C926	B6	C934	F10	C942	H9	C966	D5	CN905	E2	D927	F8	F901	B1	FB923	B4	HQ902	C6	IC911	G8	L907	F9	Q917	D5	Q924	G7	R920	G10	R936	B10	R944	G9	R954	E4	R961	B4
C908	B2	C918	D4	C927	E5	C935	B5	C945	F6	C967	C11	CN906	B4	D928	C8	FB903	B5	HBD901	A4	HQ919	C6	IC913	G8	L908	C10	Q918	G9	R913	D3	R924	C5	R937	B10	R945	G9	R955	D4	R962	D3
C909	B3	C920	C4	C928	E5	C936	C9	C951	C9	C968	E5	D901	B8	D930	D4	FB904	B6	HD901	B8	IC901	D5	IC914	B9	L909	C9	Q919	C7	R915	E8	R926	C5	R938	D10	R946	E9	R956	C6	R963	C6



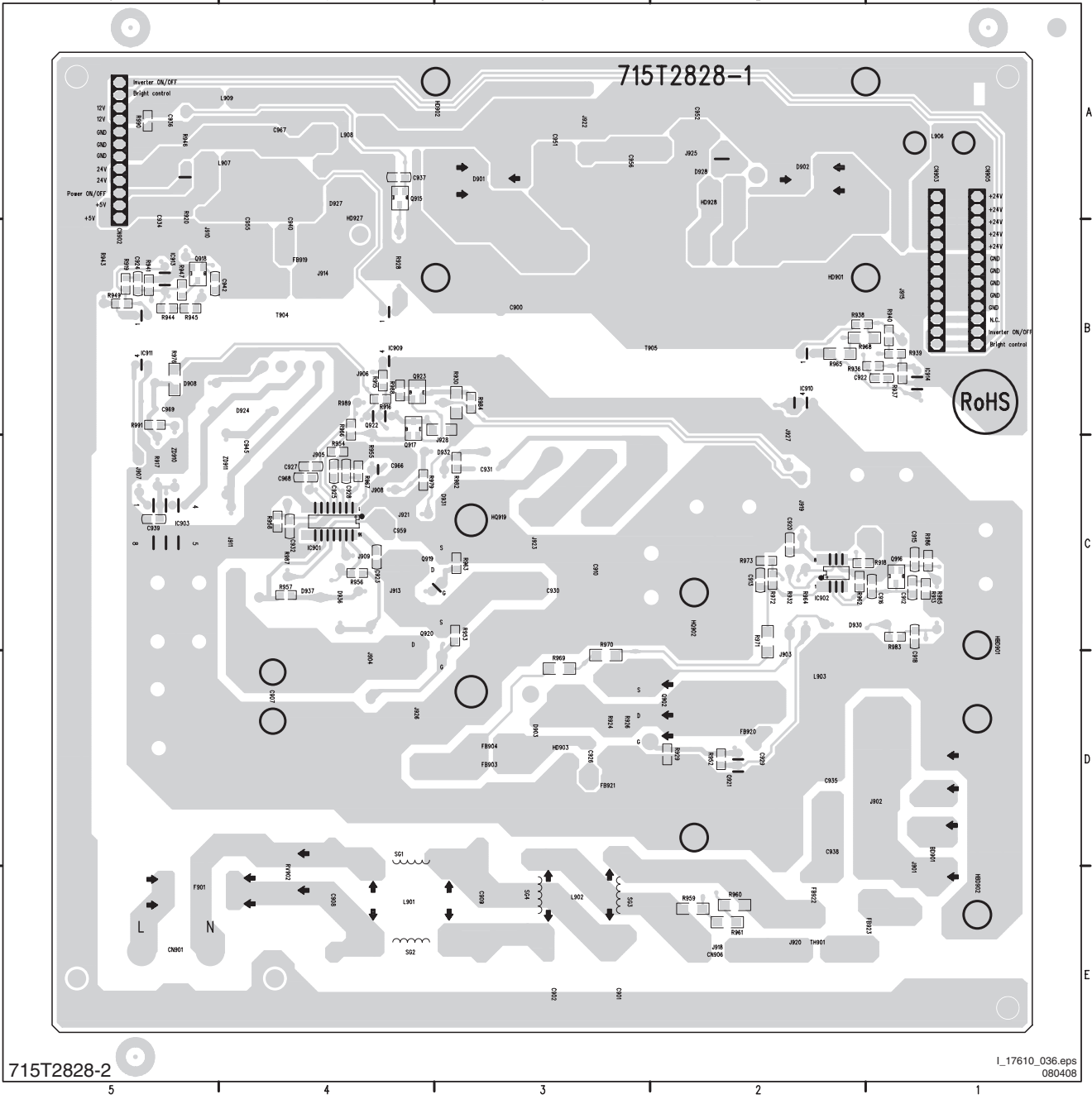
Layout Display Supply Panel (47") (Top Side)

BD901	D1	C935	D2	CN901	E5	D931	B4	HBD902	D1	IC914	B1	J914	A4	L903	C2	R926	D3	TH901	E2
C900	B3	C936	A5	CN902	A5	D932	B4	HD901	A2	J901	E1	J915	B1	L906	A1	R928	A4	ZD910	B5
C901	E3	C938	D2	CN903	A1	D936	C4	HD902	A4	J902	D1	J918	E2	L907	A5	R932	C2	ZD911	B5
C902	E3	C940	A5	CN905	A1	D937	C5	HD903	D3	J903	C2	J919	C2	L908	A4	R943	A5		
C907	D5	C945	B5	CN906	E2	F901	E5	HD927	A4	J904	D4	J920	E2	L909	A5	R946	A5		
C908	E4	C951	A3	D901	A4	FB903	D3	HD928	A2	J905	B4	J921	C4	Q902	D3	R955	B4		
C909	E4	C952	A3	D902	A2	FB904	D3	HQ902	D3	J906	B4	J922	A3	Q919	C4	R964	C2		
C910	C3	C955	A5	D903	D3	FB919	A4	HQ919	C4	J907	B5	J923	C3	Q920	C4	R985	C1		
C926	D3	C956	A3	D908	B5	FB920	D2	IC903	C5	J908	B4	J925	A2	Q921	D2	R987	C5		
C929	D2	C959	C4	D924	B5	FB921	D3	IC909	B4	J909	C4	J926	D4	Q922	B4	R989	B4		
C930	C3	C966	B4	D927	A4	FB922	E2	IC910	B2	J910	A5	J927	B2	R917	B5	RV902	D5		
C931	B4	C967	A5	D928	A2	FB923	E2	IC911	B5	J911	C5	L901	E4	R920	A5	T904	B5		
C934	A5	C969	B5	D930	C1	HBD901	D1	IC913	A5	J913	C4	L902	E3	R924	D3	T905	B3		



Layout Display Supply Panel (47") (Bottom Side)

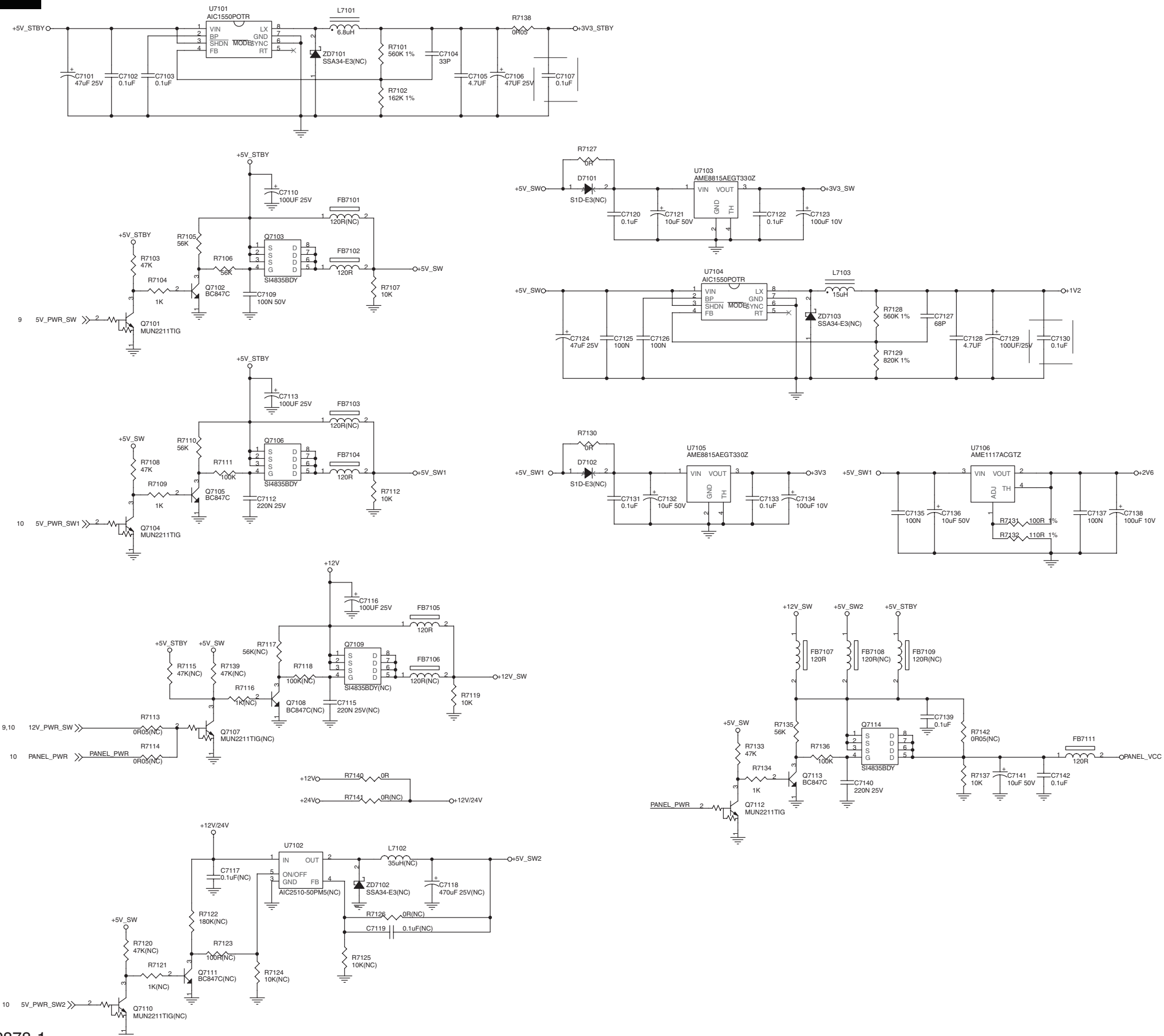
C912	C1	C924	A5	C968	B4	Q923	B4	R936	B2	R947	A5	R959	E2	R968	B2	R982	B4
C913	C2	C925	B4	IC901	C4	R913	C1	R937	B1	R949	B5	R960	E2	R969	C3	R983	C1
C915	C1	C927	B4	IC902	C2	R915	B4	R938	B2	R952	D2	R961	E2	R970	C3	R984	B4
C916	C2	C928	B4	J928	B4	R916	B4	R939	B1	R953	C4	R962	C2	R971	C2	R986	C1
C918	C1	C932	C5	Q915	A4	R918	C2	R940	B1	R954	B4	R963	C4	R972	C2	R988	B4
C920	C2	C937	A4	Q916	C1	R919	A5	R941	A5	R956	C4	R965	B2	R973	C2	R990	A5
C923	B2	C939	C5	Q917	B4	R929	D3	R944	B5	R957	C5	R966	B4	R976	B5	R991	B5
C923	C4	C942	A5	Q918	A5	R930	B4	R945	B5	R958	C5	R967	B4	R979	B4		



SSB: DC / DC Power

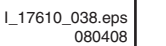
B01 DC / DC POWER

B01



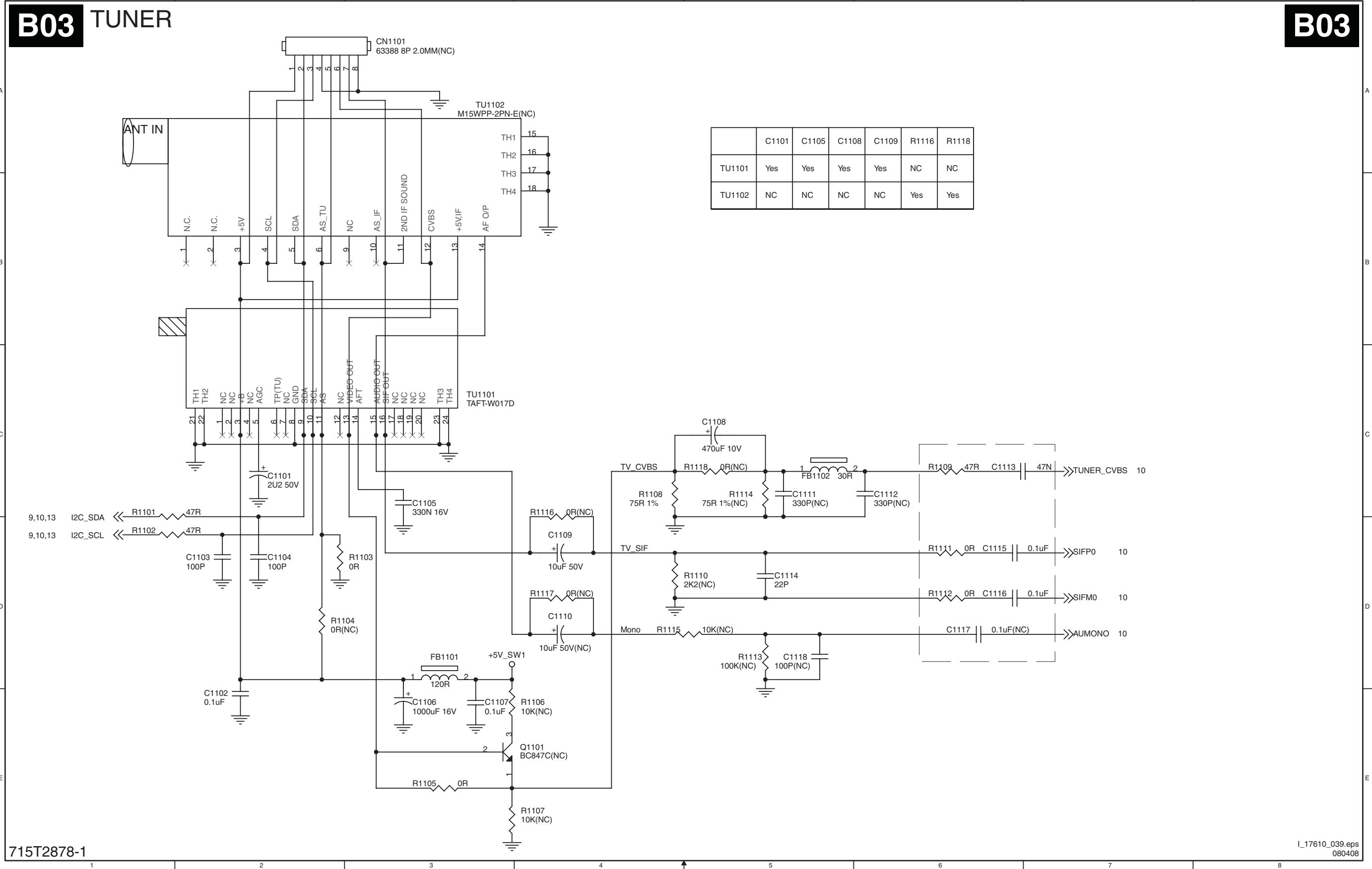
C7101	A1
C7103	A2
C7105	A4
C7107	A5
C7110	B3
C7113	D3
C7116	E3
C7118	G4
C7120	B5
C7122	B6
C7124	C5
C7126	C6
C7128	C8
C7130	C9
C7132	D6
C7134	D7
C7136	D8
C7138	D9
C7140	F7
C7142	F9
D7102	D5
FB7102C3	
FB7104D3	
FB7106F4	
FB7108E7	
FB7111F9	
L7102	G4
Q7101	C2
Q7103	C3
Q7105	D2
Q7107	F2
Q7109	F3
Q7111	H2
Q7113	F7
R7101	A4
R7103	C2
R7105	C2
R7107	C4
R7109	D2
R7111	D2
R7113	F2
R7115	F2
R7117	E3
R7119	F4
R7121	H2
R7123	H2
R7125	H3
R7127	B5
R7129	C7
R7131	E8
R7133	F6
R7135	F7
R7137	F8
R7139	F2
R7141	G4
U7101	A2
U7103	B6
U7105	D6
ZD7101A3	
C7102	A2
C7104	A4
C7106	A5
C7109	C3
C7112	D3
C7115	F3
C7117	G2
C7119	H4
C7121	B6
C7123	B7
C7125	C5
C7127	C8
C7129	C8
C7131	D5
C7133	D6
C7135	E8
C7137	E9
C7139	F8
C7141	F8
D7101	B5
FB7101B3	
FB7103D3	
FB7105E4	
FB7107E7	
FB7109E8	
L7101	A3
L7103	C7
Q7102	C2
Q7104	E2
Q7106	D3
Q7108	F3
Q7110	H2
Q7112	G6
Q7114	F7
R7102	A4
R7104	C2
R7106	C2
R7108	D2
R7110	D2
R7112	D4
R7114	F2
R7116	F3
R7118	F3
R7120	H2
R7122	H2
R7124	H3
R7126	G4
R7128	C7
R7130	D5
R7132	E8
R7134	F6
R7136	F7
R7138	A5
R7140	F4
R7142	F8
U7102	G3
U7104	C6
U7106	D8
ZD7102G3	

CN7201	C2	C7204	B4	C7209	D4	FB7201	C3	FB7206	E3	R7202	A3	R7208	B3	R7213	C4
CN7202	C2	C7205	D3	C7210	D4	FB7202	C3	FB7207	D3	R7203	A3	R7209	B2	R7214	D4
C7201	A4	C7206	D4	C7211	D3	FB7203	C3	Q7201	A3	R7204	A4	R7210	C4	R7215	E4
C7202	A4	C7207	D4	C7212	D4	FB7204	D3	Q7202	B3	R7205	A2	R7211	C4	R7216	E4
C7203	B3	C7208	D3	C7213	D4	FB7205	D3	R7201	A3	R7206	B3	R7212	C4	R7217	A3



SSB: Tuner

CN1101 A2	C1104 D2	C1108 C5	C1112 C5	C1116 D6	FB1102 C5	R1103 D2	R1107 E3	R1111 D6	R1115 D4	TU1101 B1
C1101 C2	C1105 C3	C1109 D4	C1113 C6	C1117 D6	Q1101 E3	R1104 D2	R1108 C4	R1112 D6	R1116 C4	TU1102 A1
C1102 D2	C1106 D3	C1110 D4	C1114 D5	C1118 D5	R1101 C1	R1105 E3	R1109 C6	R1113 D5	R1117 D4	
C1103 D2	C1107 D3	C1111 C5	C1115 D6	FB1101 D3	R1102 C1	R1106 D3	R1110 D4	R1114 C5	R1118 C5	

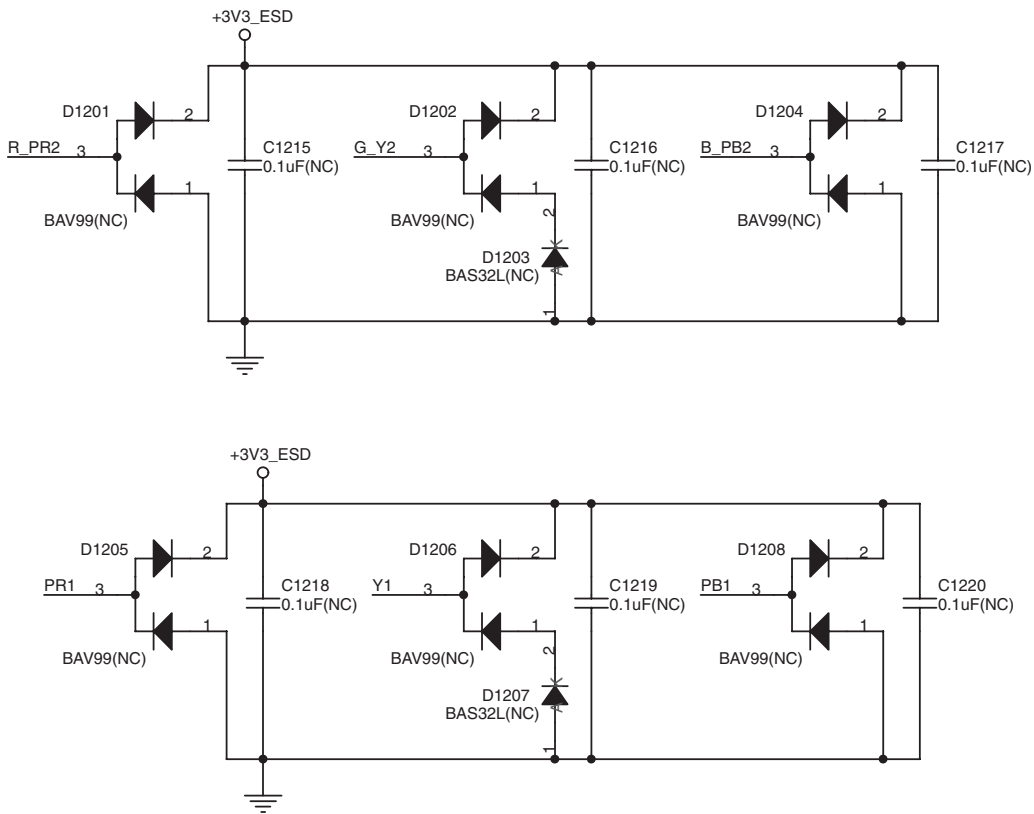
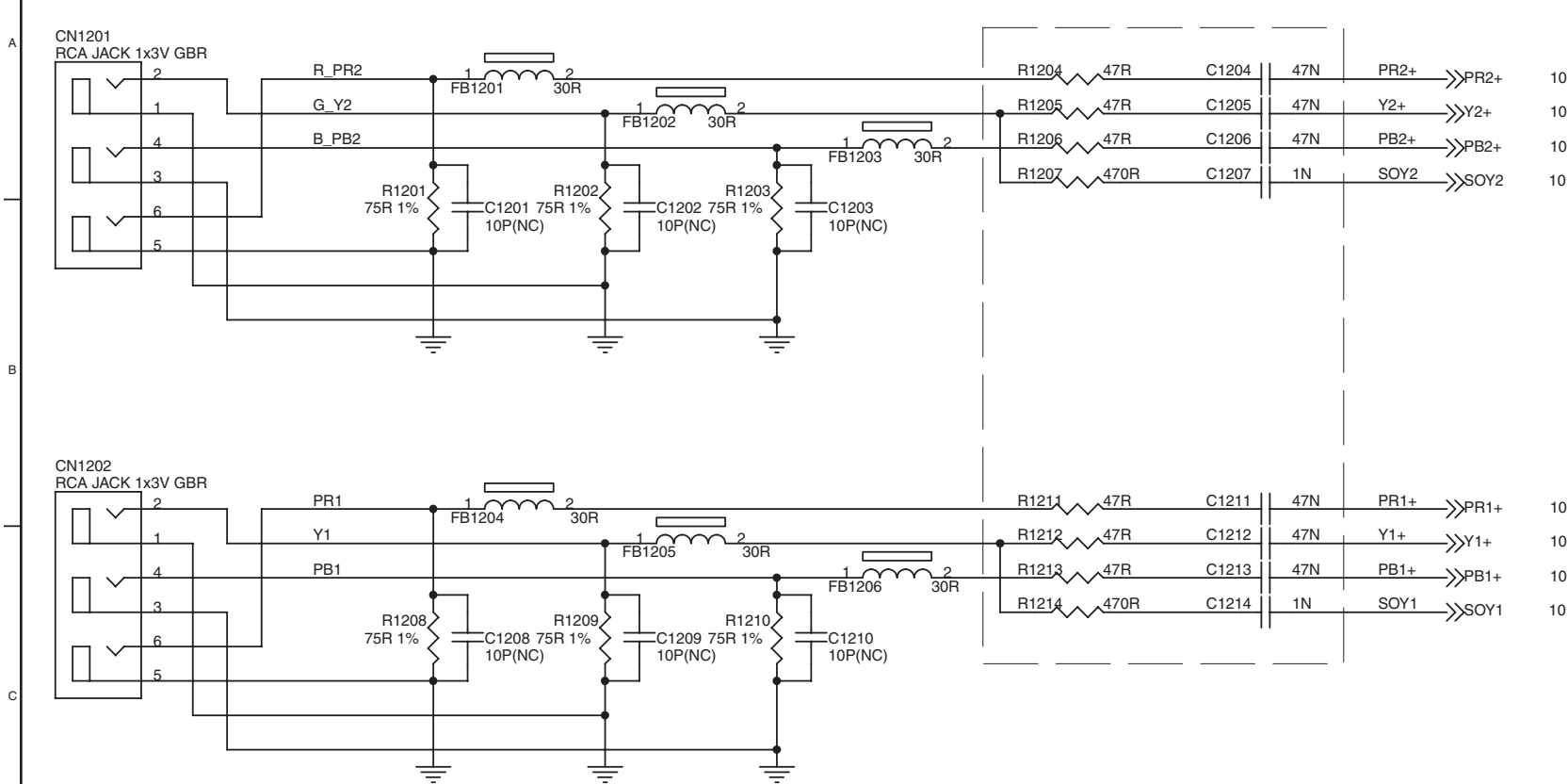


SSB: Video Input 1

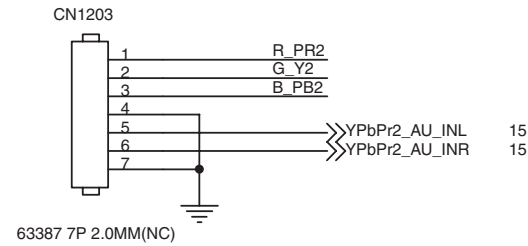
C1201	A2	C1206	A4	C1211	B4	C1216	A7	CN1201	A1	D1203	B7	D1208	B8	FB1205	B2	R1204	A4	R1209	C2
C1202	A2	C1207	A4	C1212	B4	C1217	A8	CN1202	B1	D1204	A8	FB1201	A2	FB1206	C3	R1205	A4	R1210	C3
C1203	A3	C1208	C2	C1213	C4	C1218	C6	CN1203	D1	D1205	B6	FB1202	A2	R1201	A2	R1206	A4	R1211	B4
C1204	A4	C1209	C2	C1214	C4	C1219	C7	D1201	A6	D1206	B7	FB1203	A3	R1202	A2	R1207	A4	R1212	B4
C1205	A4	C1210	C3	C1215	A6	C1220	C8	D1202	A7	D1207	C7	FB1204	B2	R1203	A3	R1208	C2	R1213	C4

B04 VIDEO INPUT 1

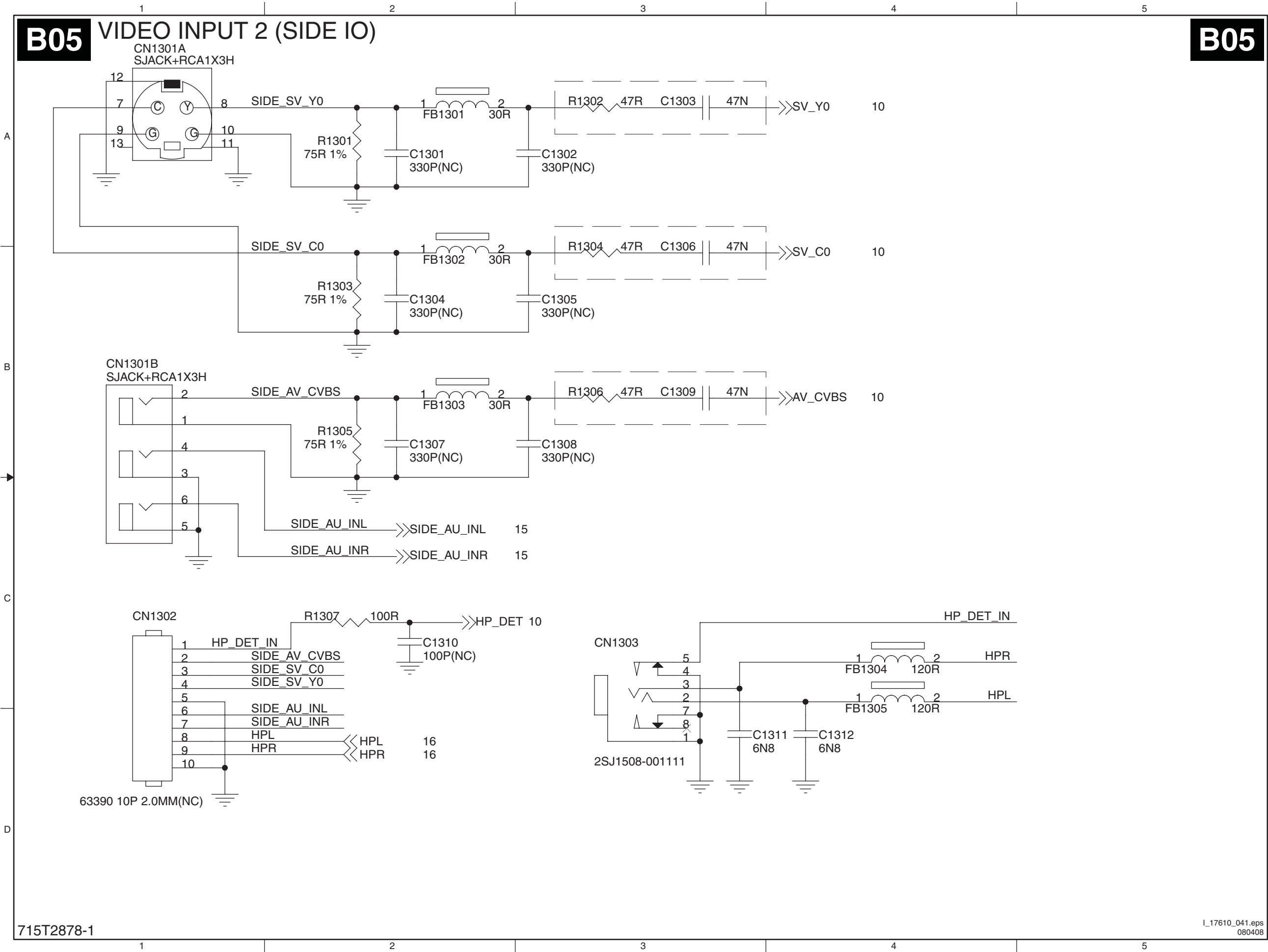
B04



For MM/DVB-T Module IN



SSB: Video Input 2 (Side IO)

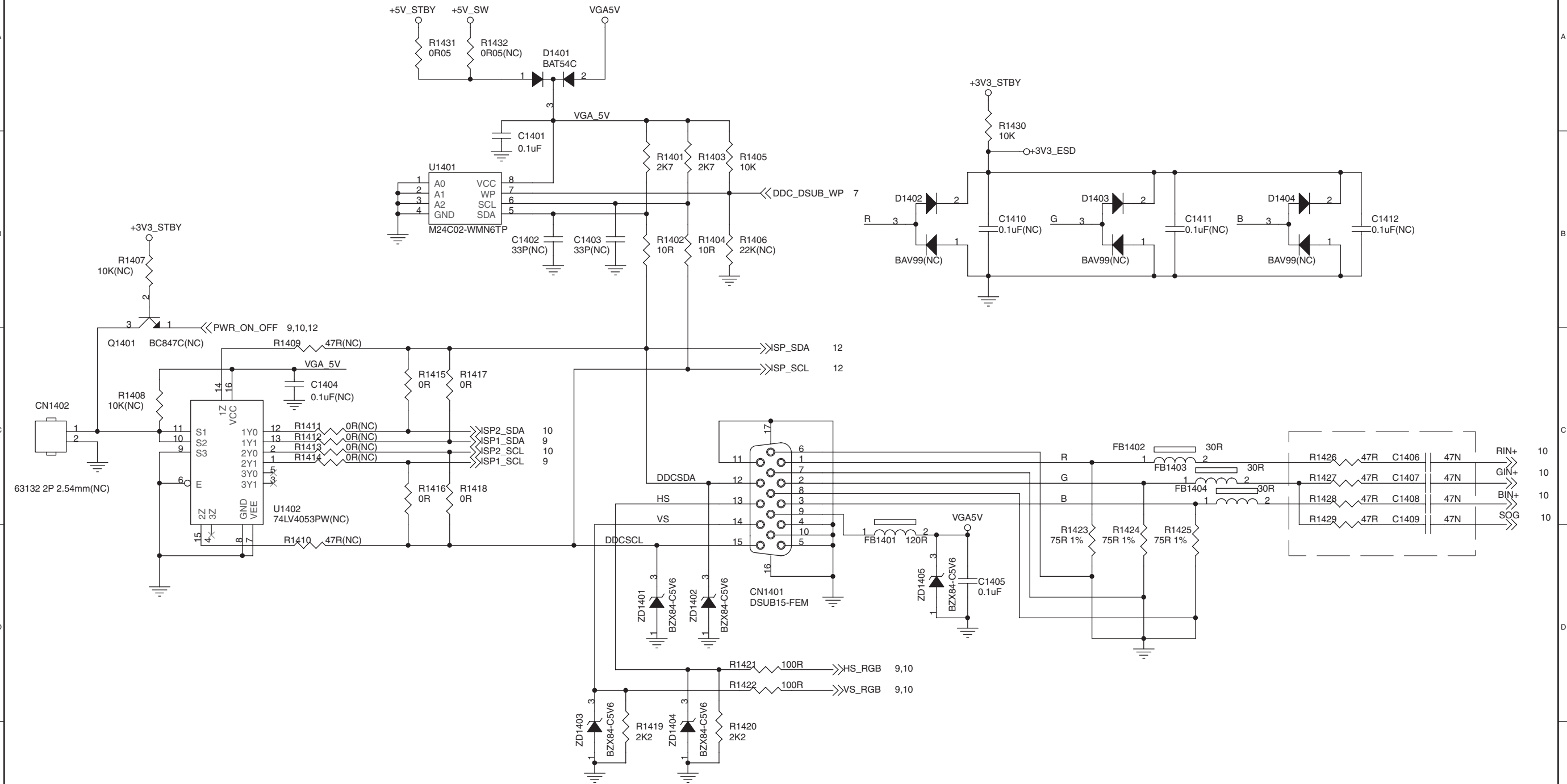


SSB: DSUB Input

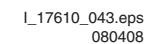
C1401	A3	C1407	C8	CN1401	C4	FB1401	C5	R1402	B4	R1408	C1	R1414	C2	R1420	D4	R1426	C7	R1432	A3	ZD1404	D4
C1402	B3	C1408	C8	CN1402	C1	FB1402	C6	R1403	B4	R1409	C2	R1415	C3	R1421	D4	R1427	C7	U1401	B3	ZD1405	D5
C1403	B4	C1409	C8	D1401	A3	FB1403	C7	R1404	B4	R1410	C2	R1416	C3	R1422	D4	R1428	C7	U1402	C1		
C1404	C2	C1410	B5	D1402	B5	FB1404	C7	R1405	B4	R1411	C2	R1417	C3	R1423	C6	R1429	C7	ZD1401	D4		
C1405	D5	C1411	B6	D1403	B6	Q1401	B1	R1406	B4	R1412	C2	R1418	C3	R1424	C6	R1430	A5	ZD1402	D4		
C1406	C8	C1412	B7	D1404	B7	R1401	B4	R1407	B1	R1413	C2	R1419	D4	R1425	C7	R1431	A3	ZD1403	D3		

B06 DSUB INPUT

B06



C1501	B3	C1506	E4	C1511	A7	C1516	A9	C1521	B8	C1528	E8	D1501	A5	FB1501	B3	Q1503	G5	R1502	B3	R1507	B4	R1512	E3	R1517	D4	R1523	D9	R1528	D9	R1533	G7	R1538	E9	ZD1501	B3	ZD1506	C1
C1502	B4	C1507	E4	C1512	A8	C1517	A9	C1522	C8	C1529	D7	D1502	D5	FB1502	E3	Q1504	G7	R1503	B3	R1508	B5	R1513	E3	R1518	D5	R1524	D9	R1529	E9	R1534	G8	R1539	E9	ZD1502	E3	ZD1507	E1
C1503	B4	C1508	E5	C1513	A8	C1518	A9	C1523	C8	C1530	E7	D1503	B7	FB1503	A6	Q1505	G9	R1504	B2	R1509	B5	R1514	E2	R1519	E5	R1525	D9	R1530	E9	R1535	G9	U1501	B5	ZD1503	C2	ZD1508	F1
C1504	A5	C1509	A7	C1514	A8	C1519	A10	C1524	D8	CN1501	A1	D1504	B7	Q1501	C2	Q1506	E6	R1505	A5	R1510	C2	R1515	D5	R1521	D9	R1526	D9	R1531	F5	R1536	E7	U1502	E5	ZD1504	C1	ZD1509	F1
C1505	E3	C1510	A7	C1515	A9	C1520	B8	C1526	D8	CN1502	D1	D1505	G4	Q1502	C3	Q1507	F6	R1506	B4	R1511	C3	R1516	D4	R1522	D9	R1527	D9	R1532	G7	R1537	F7	U1503	C7	ZD1505	C1		

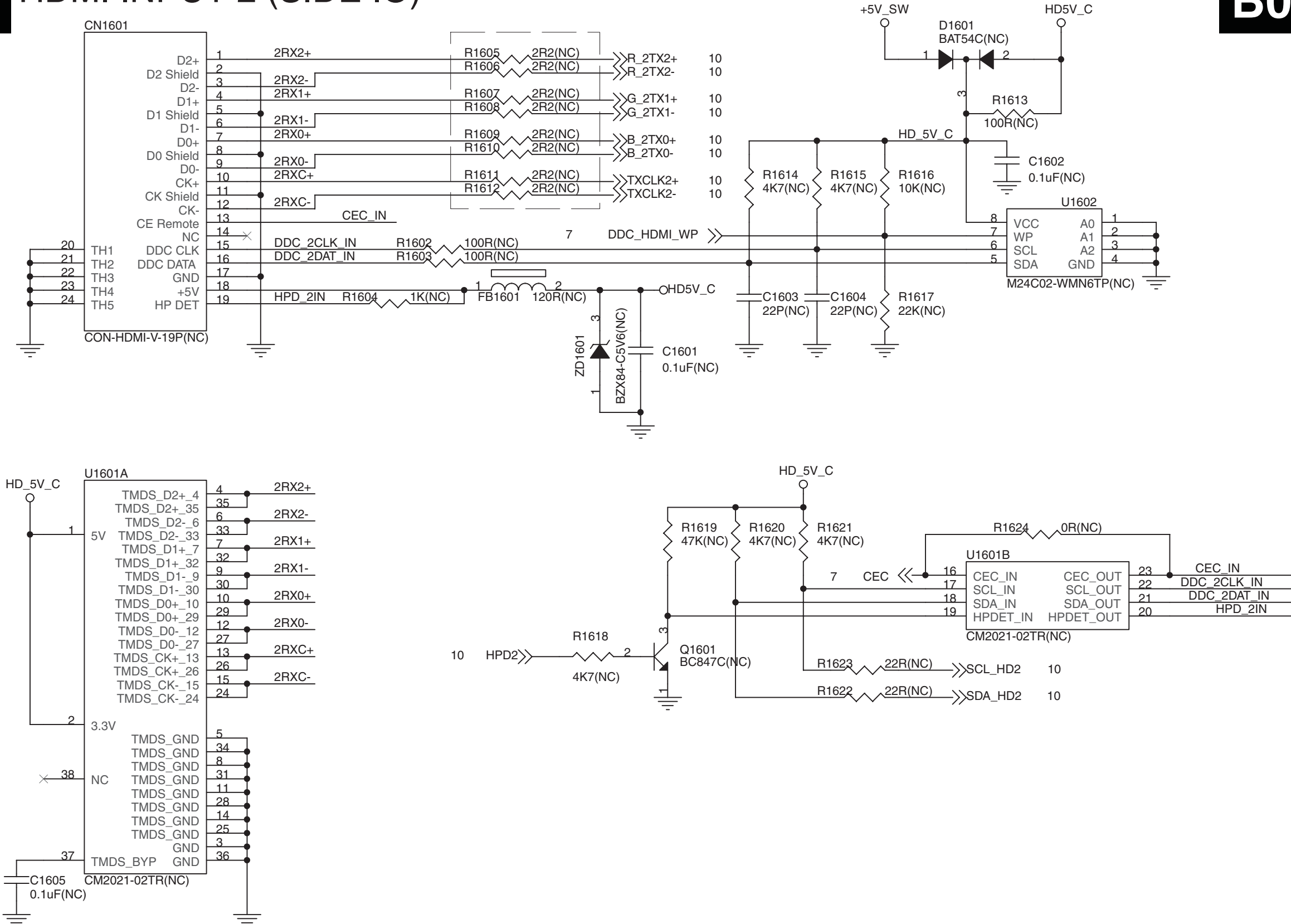


SSB: HDMI Input 2 (Side IO)

B08

HDMI INPUT 2 (SIDE IO)

B08



CN1601 A1
C1601 B3
C1602 A5
C1603 B4
C1604 B4
C1605 D1
D1601 A5
FB1601 B3
Q1601 C3
R1602 B3
R1603 B3
R1604 B2
R1605 A3
R1606 A3
R1607 A3
R1608 A3
R1609 A3
R1610 A3
R1611 A3
R1612 A3
R1613 A5
R1614 A4
R1615 A4
R1616 A4
R1617 B4
R1618 C3
R1619 C3
R1620 C4
R1621 C4
R1622 C4
R1623 C4
R1624 C5
U1601A B1
U1601B C5
U1602 A5
ZD1601 B3

715T2878-1

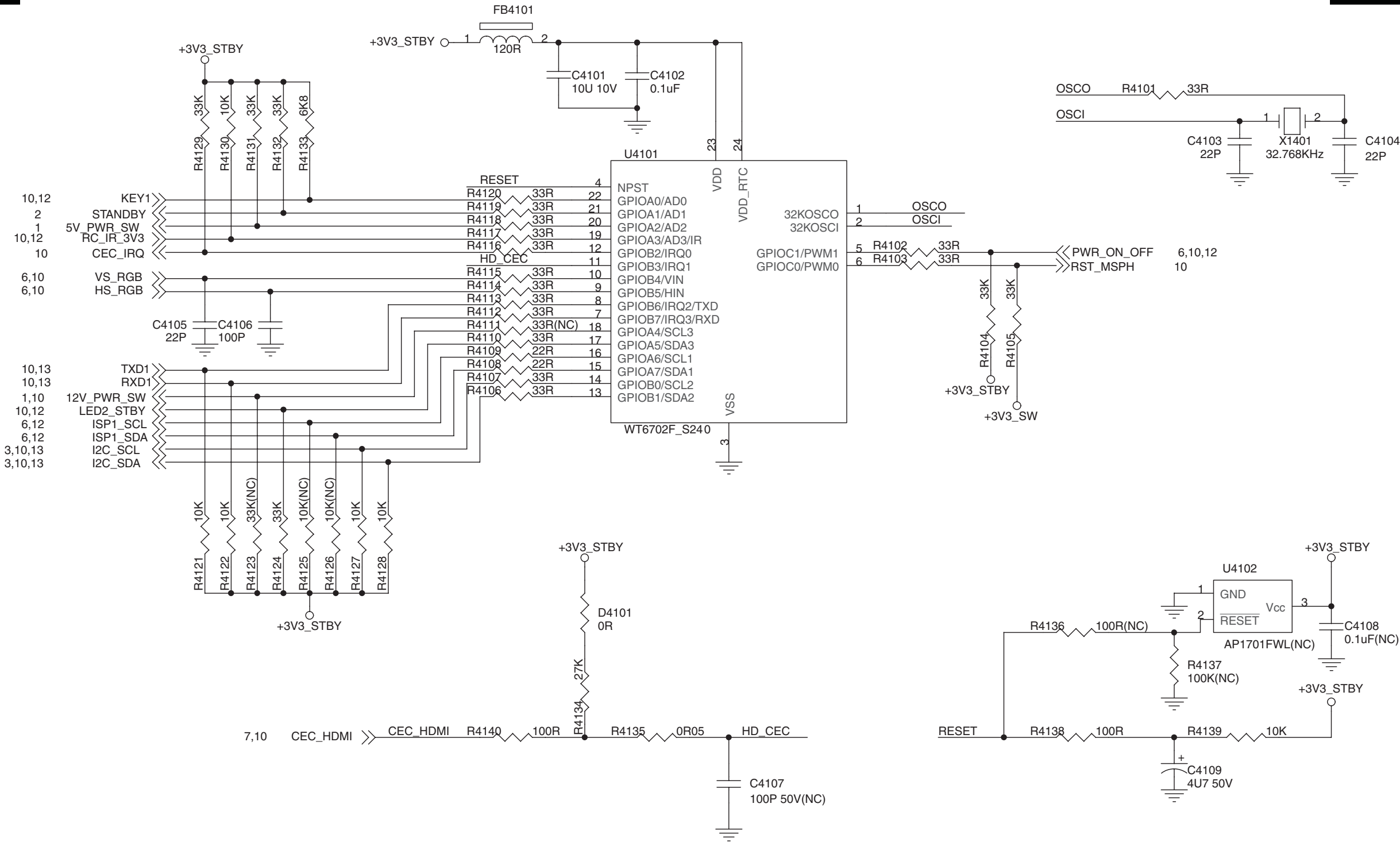
I_17610_044.eps
080408

SSB: WT6702F (Standby MCU)

B09

WT6702F (STANDBY MCU)

B09



- C4101 A3
- C4102 A3
- C4103 A6
- C4104 A6
- C4105 B2
- C4106 B2
- C4107 D4
- C4108 C6
- C4109 D5
- D4101 C3
- FB4101 A3
- R4101 A5
- R4102 B4
- R4103 B4
- R4104 B5
- R4105 B5
- R4106 B3
- R4107 B3
- R4108 B3
- R4109 B3
- R4110 B3
- R4111 B3
- R4112 B3
- R4113 B3
- R4114 B3
- R4115 B3
- R4116 B3
- R4117 B3
- R4118 B3
- R4119 A3
- R4120 A3
- R4121 C2
- R4122 C2
- R4123 C2
- R4124 C2
- R4125 C2
- R4126 C2
- R4127 C2
- R4128 C2
- R4129 A2
- R4130 A2
- R4131 A2
- R4132 A2
- R4133 A2
- R4134 C3
- R4135 D3
- R4136 C5
- R4137 C5
- R4138 D5
- R4139 D6
- R4140 D3
- U4101 A3
- U4102 C6
- X1401 A6

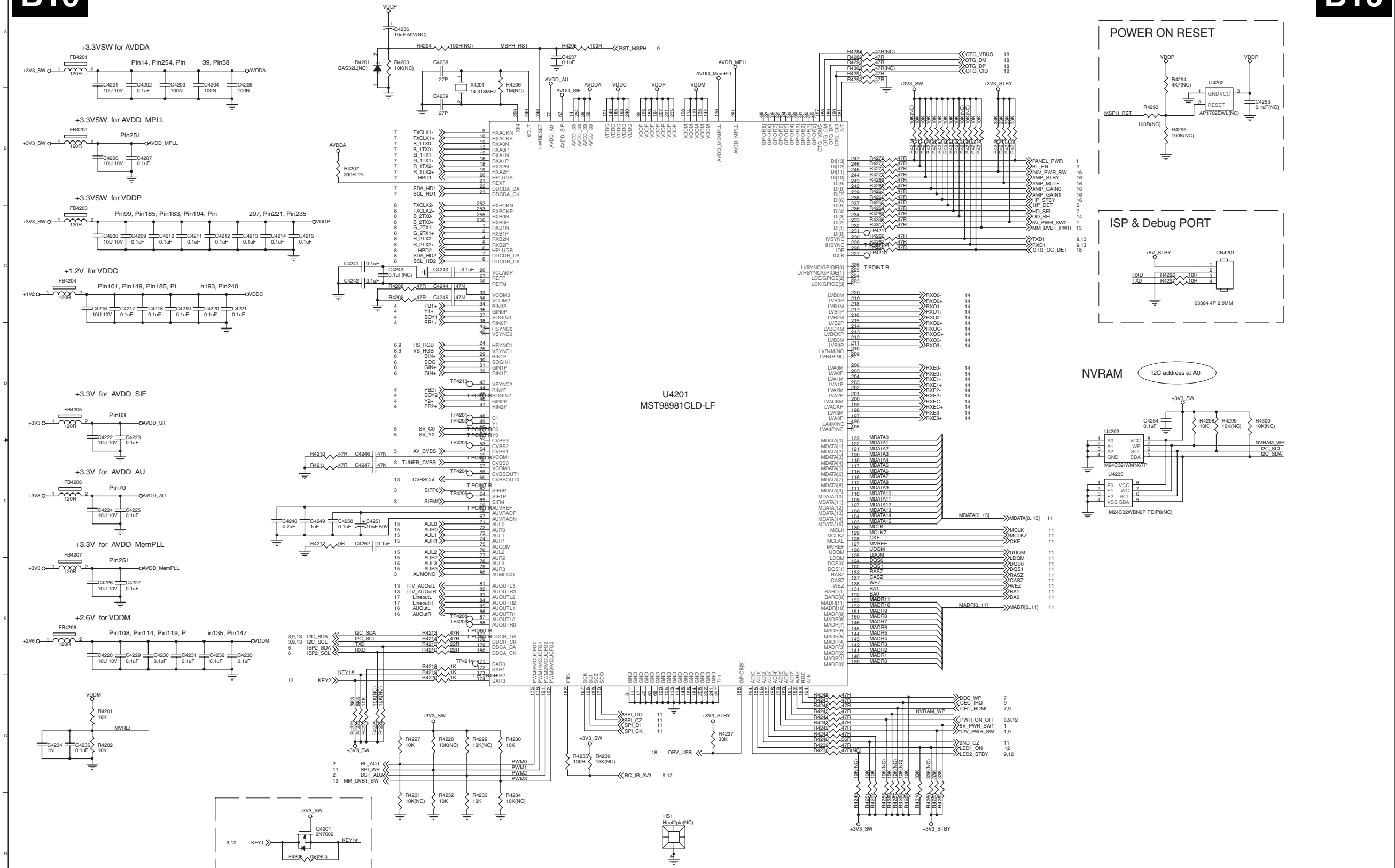
SSB: Scaler MST98981CLD

C4201 A1	C4210 C2	C4219 C2	C4228 F1	C4237 A5	C4246 E3	CN4201 C10	FB4208 F1	R4207 B3	R4216 F4	R4227 G4	R4236 G5	R4245 G7	R4254 G8	R4263 C7	R4272 B7	R4281 B8	R4290 A7	R4299 D10	R4312 B8	TP4211 C7
C4202 A1	C4211 C2	C4220 C2	C4229 F1	C4238 A4	C4247 E3	D4201 A3	HS1 H6	R4208 C4	R4218 F4	R4228 G4	R4237 G6	R4246 G7	R4255 G7	R4264 B7	R4273 B7	R4282 B8	R4291 A7	R4300 D10	TP4201 D4	TP4213 D4
C4203 A2	C4212 C2	C4221 C2	C4230 F2	C4248 E3	C4248 E3	FB4201 A1	H31 H3	R4209 C4	R4219 F4	R4229 G4	R4238 G7	R4247 G7	R4256 G7	R4265 B7	R4274 B8	R4283 B8	R4292 A7	R4305 H3	TP4202 D4	TP4214 F4
C4204 A2	C4213 C2	C4222 D1	C4231 F2	C4240 C4	C4249 E3	FB4202 B1	R4201 G1	R4210 E3	R4220 F4	R4230 G4	R4239 G7	R4248 G7	R4257 G7	R4266 B7	R4275 B8	R4284 B8	R4293 B9	R4306 C7	TP4203 D4	U4201 B4
C4205 A2	C4214 C2	C4223 D1	C4232 F2	C4241 C3	C4250 E3	FB4203 C1	R4202 G1	R4211 E3	R4221 G3	R4231 G4	R4240 G7	R4249 G7	R4258 G7	R4267 B7	R4276 B8	R4285 B8	R4294 A10	R4307 B8	TP4204 E4	U4202 A10
C4206 B1	C4215 C3	C4224 E1	C4233 F2	C4242 C3	C4251 E3	FB4204 C1	R4203 A3	R4212 E3	R4222 G3	R4232 G4	R4241 G7	R4250 G8	R4259 G8	R4268 B7	R4277 B8	R4286 B8	R4295 B10	R4308 A7	TP4205 E4	U4203 D9
C4207 B1	C4216 C1	C4225 E1	C4234 G1	C4243 C3	C4252 E3	FB4205 D1	R4204 A4	R4213 F4	R4223 G3	R4233 G4	R4242 G7	R4251 G7	R4260 C7	R4269 B7	R4278 B8	R4287 B8	R4296 C10	R4309 B8	TP4206 F4	U4205 E9
C4208 C1	C4217 C1	C4226 F1	C4235 G1	C4244 C4	C4253 B10	FB4206 E1	R4205 A5	R4214 F4	R4225 G3	R4234 G4	R4243 G7	R4252 G7	R4261 C7	R4270 B7	R4279 B8	R4288 A7	R4297 C10	R4310 G8	TP4207 F4	X4201 A4
C4209 C1	C4218 C2	C4227 F1	C4236 A3	C4245 C4	C4254 D10	FB4207 E1	R4206 A4	R4215 F4	R4226 G3	R4235 G5	R4244 G7	R4253 G8	R4262 C7	R4271 B7	R4280 B8	R4289 A7	R4298 D10	R4311 C7	TP4210 C7	

B10

SCALER MST98981CLD

B10

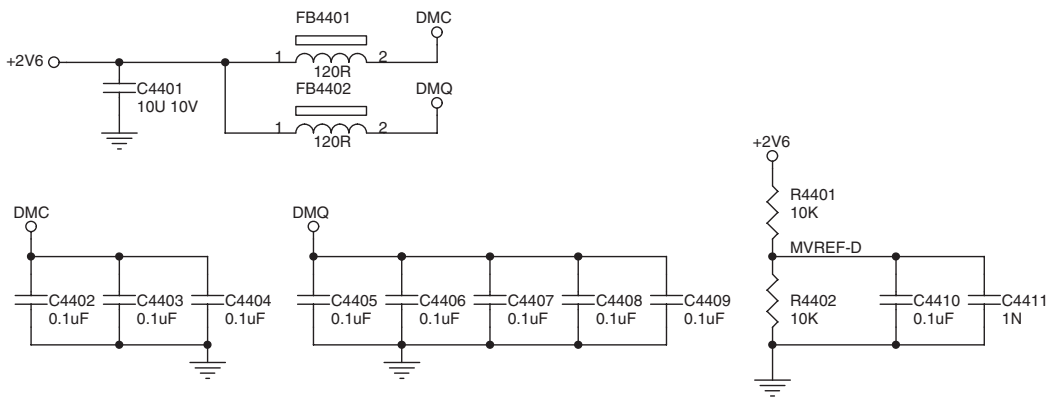


SSB: Flash ROM & Memory

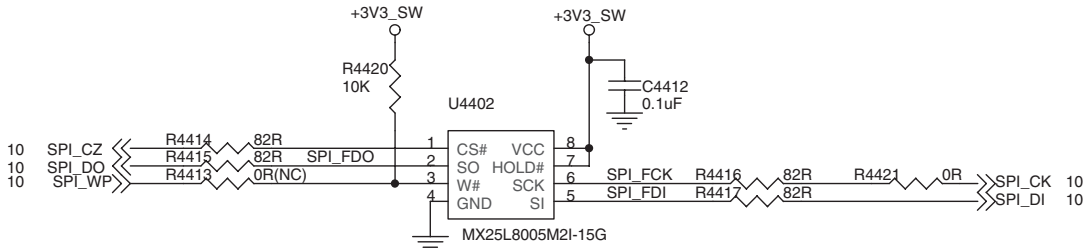
B11

FLASH ROM & MEMORY

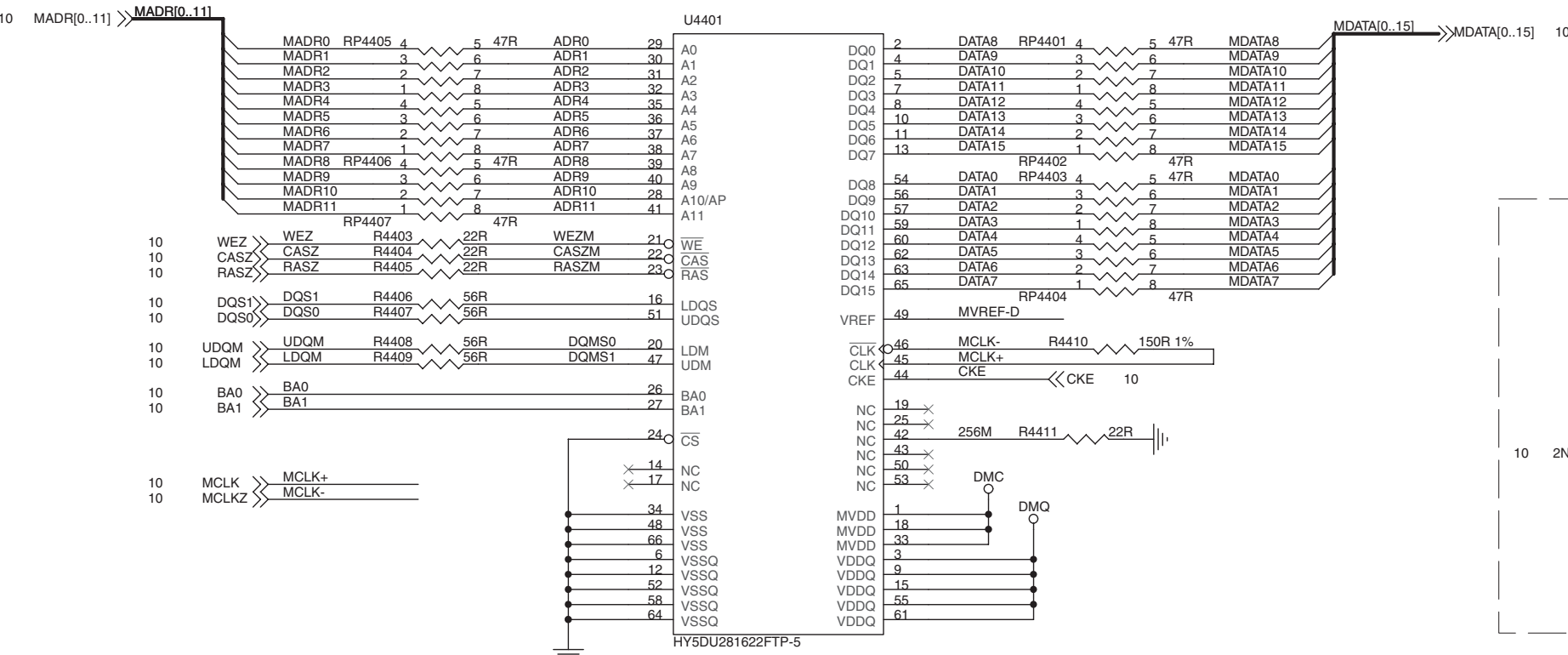
B11



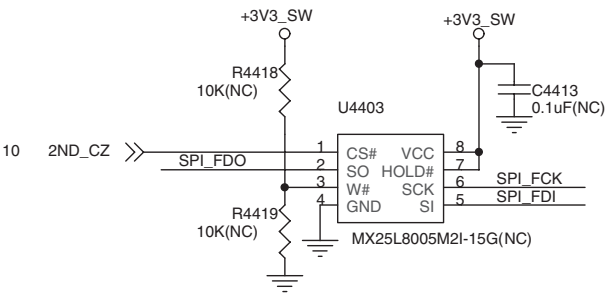
1st SPI Flash ROM for Main Control



MODEL	U4402
CHINA (/93)	MX25L4005 (4M)
AP (/98)	MX25L8005 (8M)



2nd SPI Flash ROM for USB



DDR 2M x 16bit x 4BK

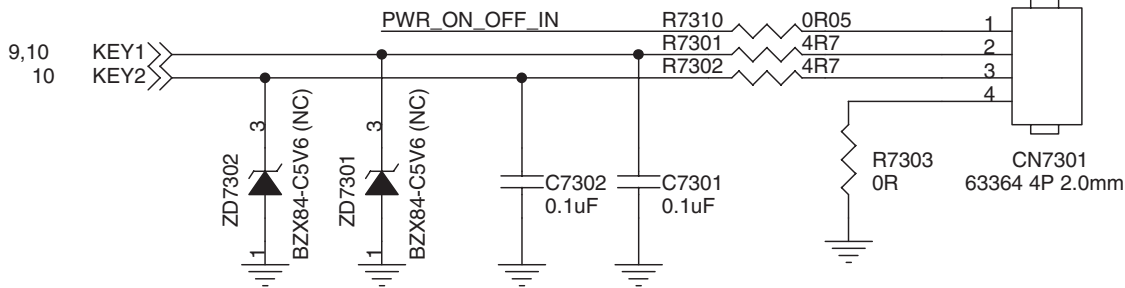
SSB: Key, IR BD, & ComPair I/F

B12

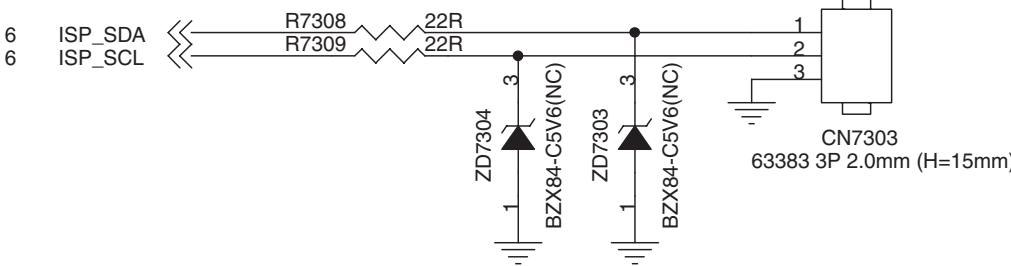
KEY, IR BD & COMPAIR I/F

B12

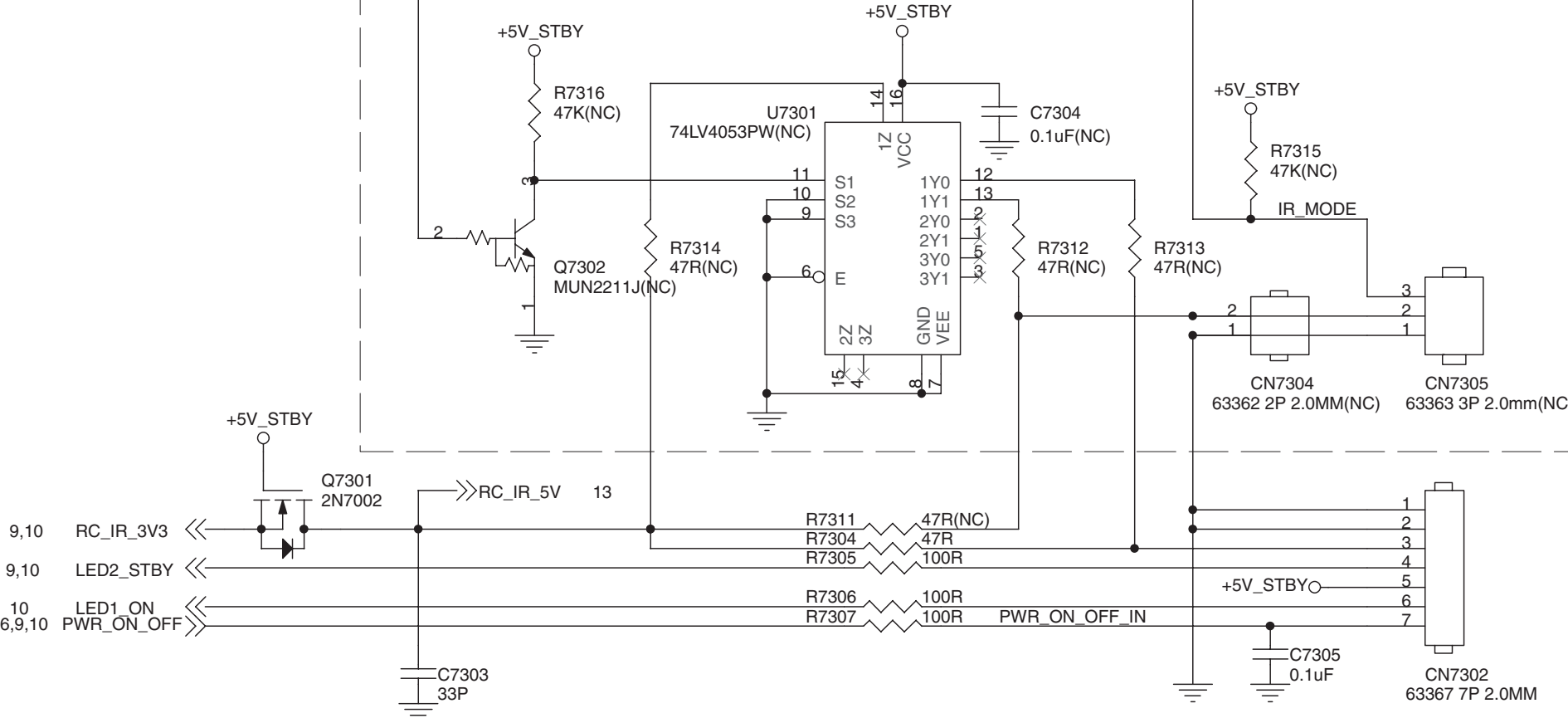
For Key BOARD



For Compair I/F



For IR BOARD



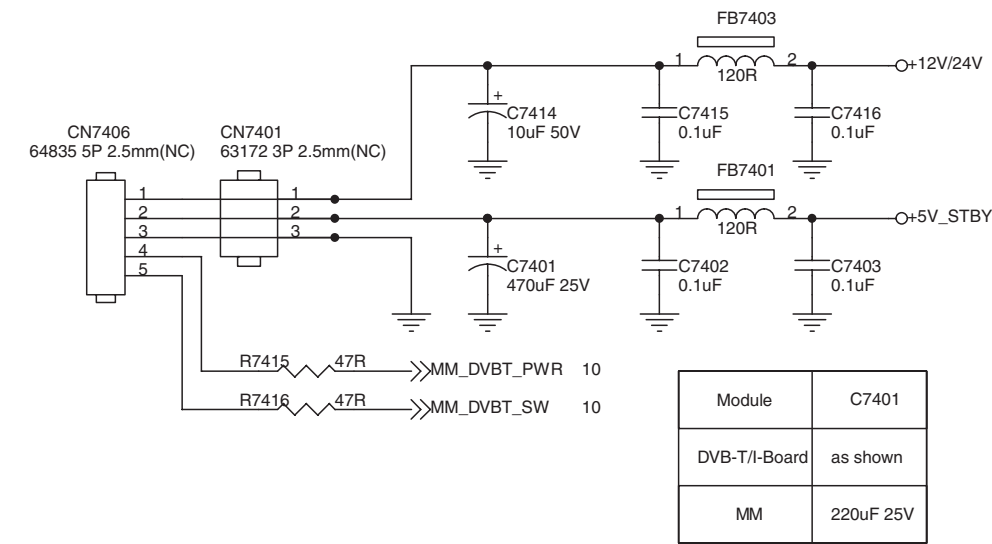
- CN7301 A3
- CN7302 C5
- CN7303 A6
- CN7304 C4
- CN7305 C5
- C7301 A2
- C7302 A2
- C7303 D2
- C7304 B4
- C7305 D4
- Q7301 C2
- Q7302 C2
- R7301 A2
- R7302 A2
- R7303 A3
- R7304 D3
- R7305 D3
- R7306 D3
- R7307 D3
- R7308 A5
- R7309 A5
- R7310 A2
- R7311 D3
- R7312 C4
- R7313 C4
- R7314 C3
- R7315 C4
- R7316 B2
- U7301 C3
- ZD7301 A2
- ZD7302 A1
- ZD7303 A5
- ZD7304 A5

SSB: ITV I/F

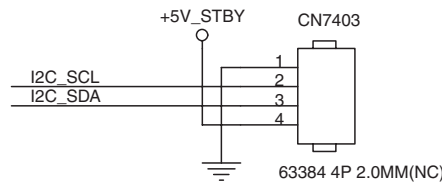
B13 ITV I/F

B13

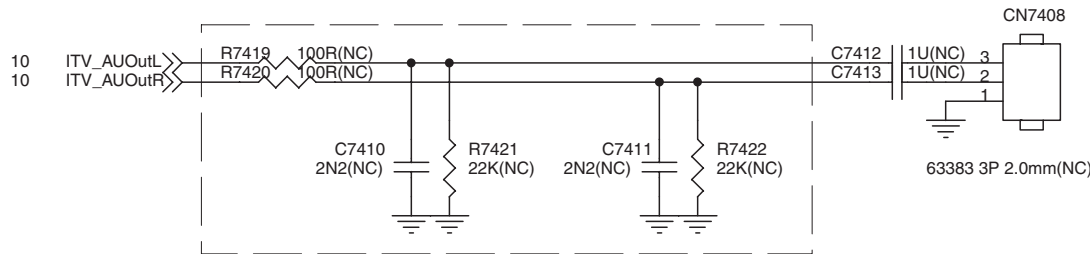
Power for MM/DVB-T Module/ I-BOARD (ITV Level 2)



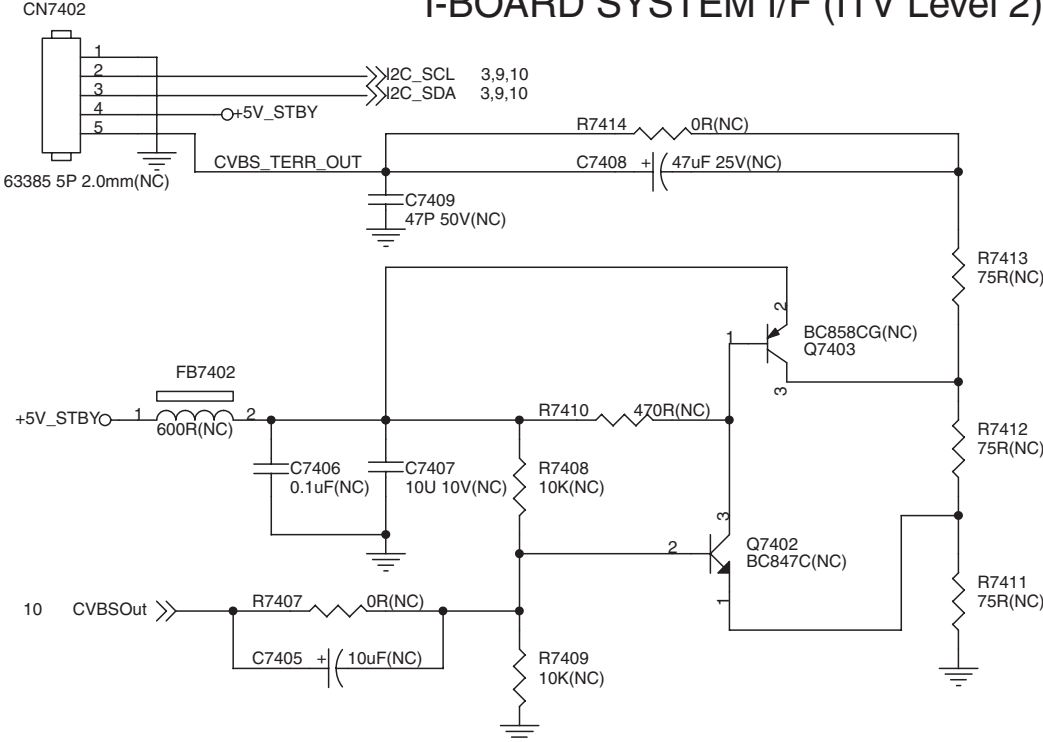
LCD CLOCK I/F (ITV Level 2)



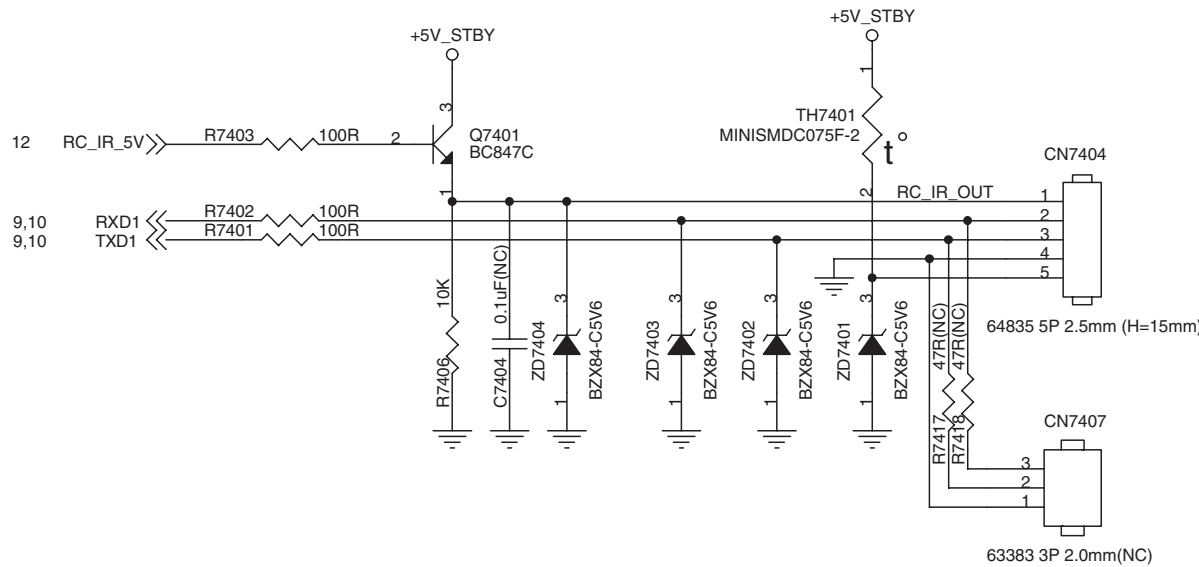
BATHROOM AUDIO IN I/F (ITV Level 2)



I-BOARD SYSTEM I/F (ITV Level 2)



PORT for ITV Level 1/ DVB-T Module

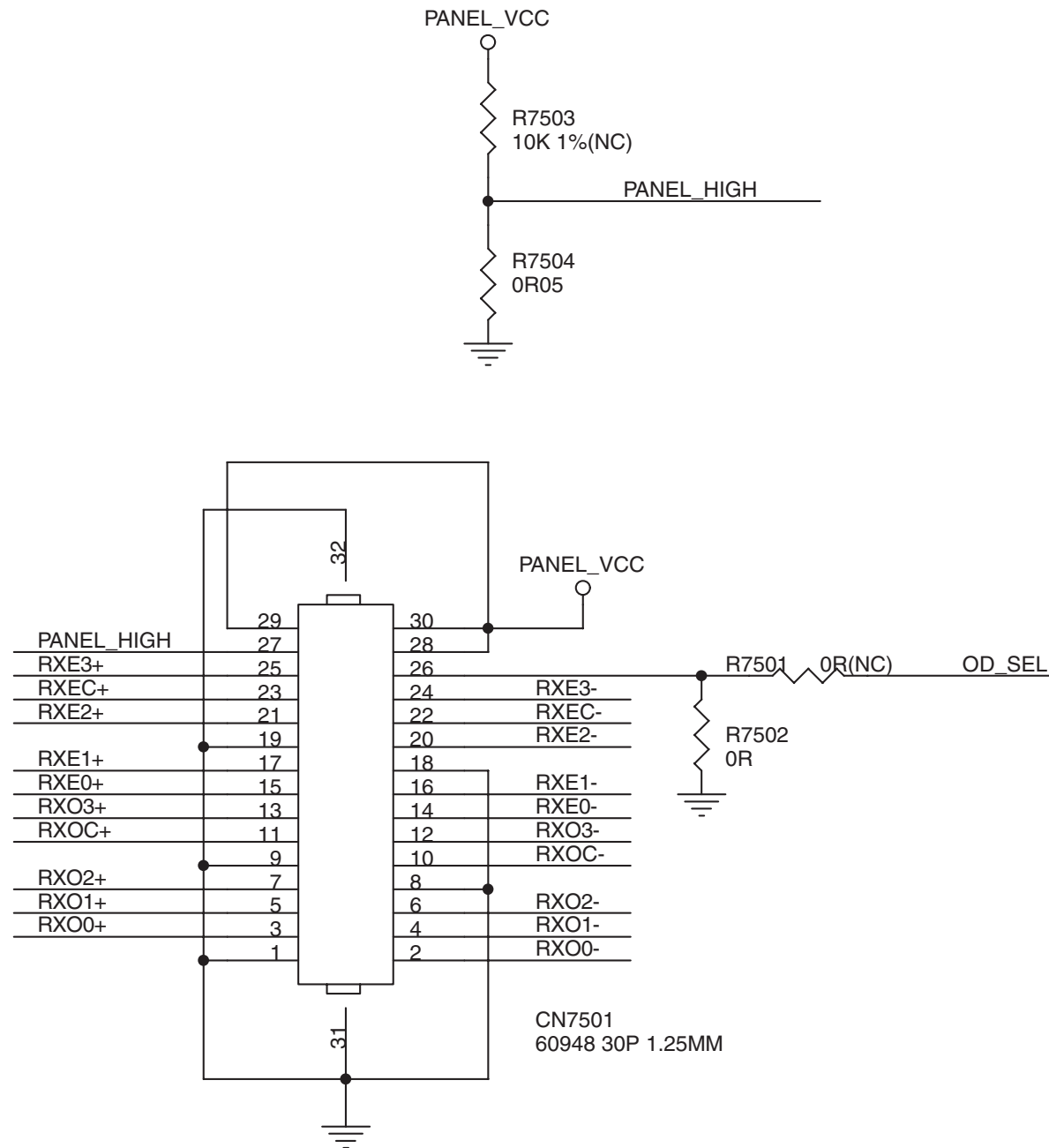


- C7401 A2
- C7402 B2
- C7403 B3
- C7404 D5
- C7405 B5
- C7406 B5
- C7407 B5
- C7408 A6
- C7409 A5
- C7410 E2
- C7411 E2
- C7412 D3
- C7413 D3
- C7414 A2
- C7415 A2
- C7416 A3
- CN7401 A1
- CN7402 A4
- CN7403 C2
- CN7404 D7
- CN7406 A1
- CN7407 D7
- CN7408 D3
- FB7401 A3
- FB7402 B4
- FB7403 A3
- Q7401 C5
- Q7402 B6
- Q7403 B6
- R7401 D5
- R7402 D5
- R7403 C5
- R7406 D5
- R7407 B5
- R7408 B5
- R7409 B5
- R7410 B6
- R7411 B7
- R7412 B7
- R7413 A7
- R7414 A6
- R7415 B1
- R7416 B1
- R7417 D7
- R7418 D7
- R7419 D1
- R7420 D1
- R7421 E2
- R7422 E3
- TH7401 C6
- ZD7401 D6
- ZD7402 D6
- ZD7403 D6
- ZD7404 D6

B14 PANEL I/F

B14

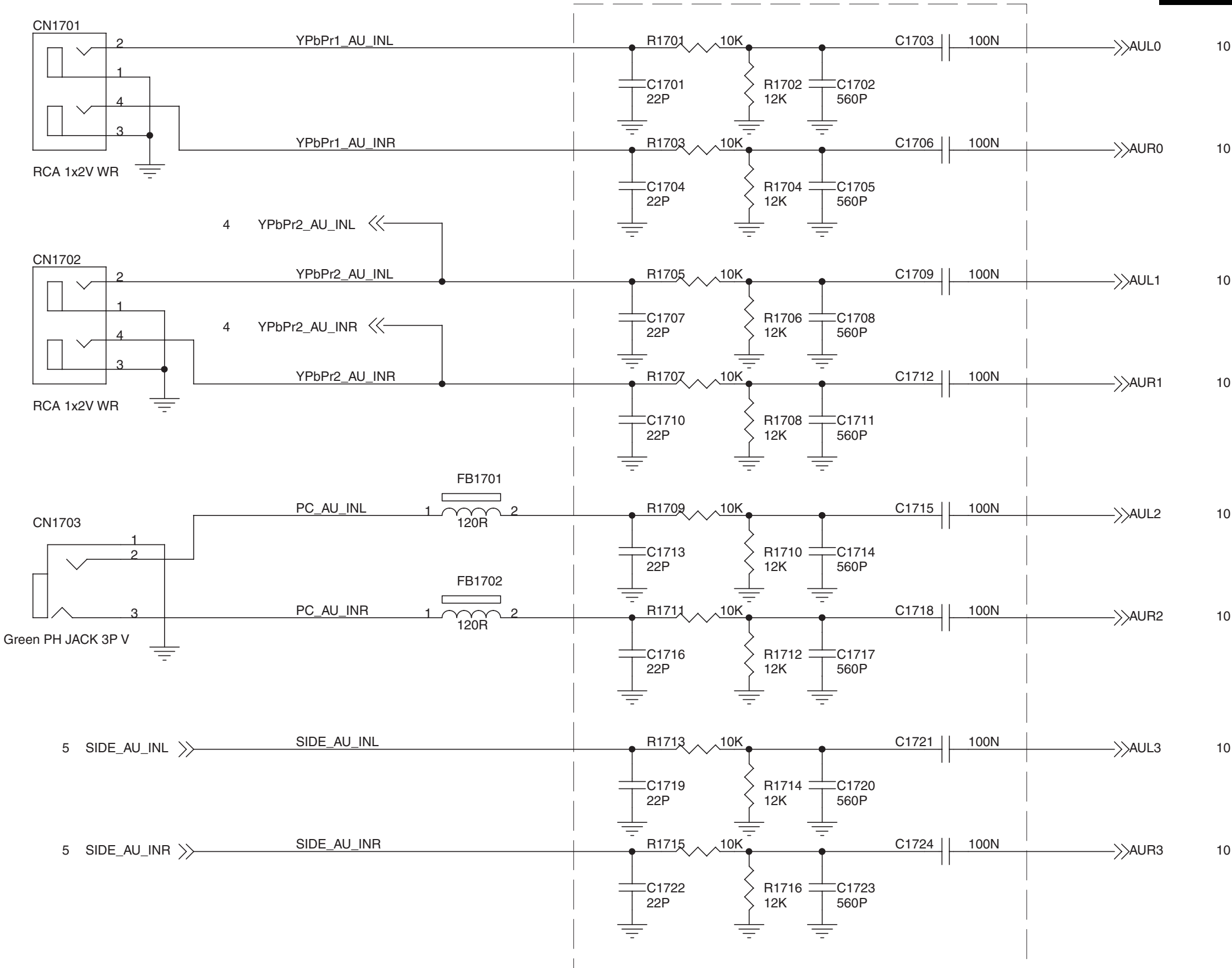
RXE3+		RXE3+	10
RXE3-		RXE3-	10
RXEC+		RXEC+	10
RXEC-		RXEC-	10
RXE2+		RXE2+	10
RXE2-		RXE2-	10
RXE1+		RXE1+	10
RXE1-		RXE1-	10
RXE0+		RXE0+	10
RXE0-		RXE0-	10
RXO3+		RXO3+	10
RXO3-		RXO3-	10
RXOC+		RXOC+	10
RXOC-		RXOC-	10
RXO2+		RXO2+	10
RXO2-		RXO2-	10
RXO1+		RXO1+	10
RXO1-		RXO1-	10
RXO0+		RXO0+	10
RXO0-		RXO0-	10
OD_SEL		OD_SEL	10



SSB: Audio I/F

B15 AUDIO I/F

B15



- CN1701 A1
- CN1702 B1
- CN1703 C1
- C1701 A3
- C1702 A4
- C1703 A5
- C1704 A3
- C1705 A4
- C1706 A5
- C1707 B3
- C1708 B4
- C1709 B5
- C1710 B3
- C1711 B4
- C1712 B5
- C1713 C3
- C1714 C4
- C1715 B5
- C1716 C3
- C1717 C4
- C1718 C5
- C1719 C3
- C1720 C4
- C1721 C5
- C1722 D3
- C1723 D4
- C1724 D5
- FB1701 B3
- FB1702 C3
- R1701 A4
- R1702 A4
- R1703 A4
- R1704 A4
- R1705 B4
- R1706 B4
- R1707 B4
- R1708 B4
- R1709 B4
- R1710 C4
- R1711 C4
- R1712 C4
- R1713 C4
- R1714 C4
- R1715 D4
- R1716 D4

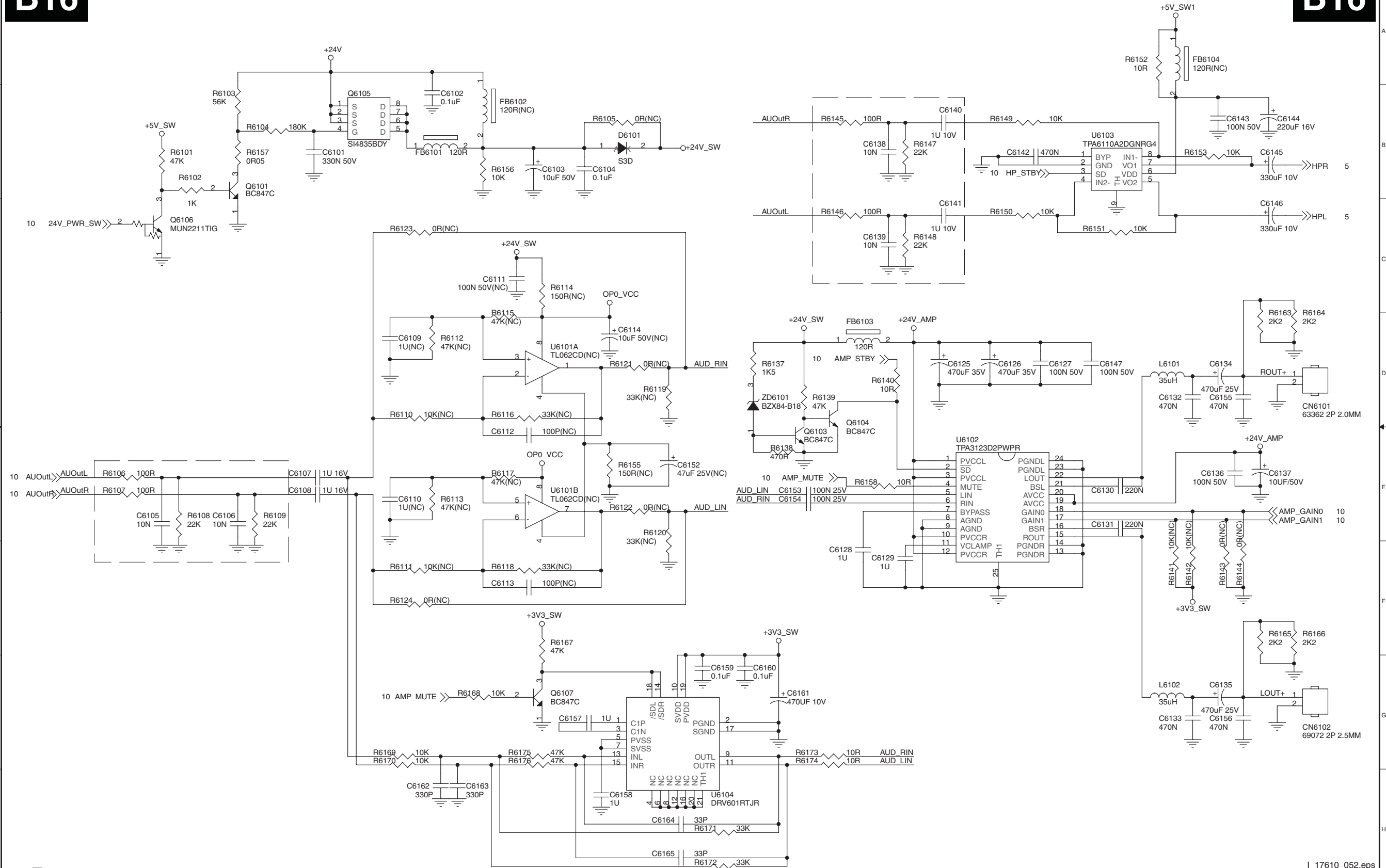
SSB: Audio Amplifier

CN6101 D10	C6113 F4	C6137 E10	C6155 D9	FB6103 D7	R6105 B5	R6119 D5	R6145 B7	R6164 C10	U6101B E4	C6110 E3	C6134 D9	C6152 E5	D6101 B5	R6102 B2	R6116 D4	R6142 E9	R6157 B2	R6175 G4
C6101 B3	C6125 D7	C6139 C7	C6157 G5	L6101 D9	R6107 E1	R6121 D5	R6147 B7	R6166 F10	U6103 B8	C6112 D4	C6136 E9	C6154 E6	FB6102 B4	R6104 B2	R6118 F4	R6144 E9	R6163 C10	U6101A D4
C6103 B4	C6127 D8	C6141 C7	C6159 F6	Q6101 B2	R6109 E2	R6123 C3	R6149 B8	R6168 G4	CN6102 G10	C6114 D5	C6138 B7	C6156 G9	FB6104 A9	R6106 E1	R6120 E5	R6146 C7	R6165 F10	U6102 E7
C6105 E2	C6129 F7	C6143 B9	C6161 G6	Q6104 D6	R6111 F3	R6137 D6	R6151 C9	R6170 G3	C6102 B4	C6126 D8	C6140 B7	C6158 H5	L6102 G9	R6108 E2	R6122 E5	R6148 C7	R6167 F4	U6104 G5
C6107 E3	C6131 E9	C6145 B10	C6163 G4	Q6106 C1	R6113 E4	R6139 D6	R6153 B9	R6172 H6	C6104 B5	C6128 E7	C6142 B8	C6160 F6	Q6103 D6	R6110 D3	R6124 F3	R6150 C8	R6169 G3	
C6109 D3	C6133 G9	C6147 D8	C6165 H5	R6101 B2	R6115 C4	R6141 E9	R6156 B4	R6174 G6	C6106 E2	C6130 E9	C6144 B10	C6162 G4	Q6105 B3	R6112 D4	R6138 E6	R6152 A9	R6171 H6	
C6111 C4	C6135 G9	C6153 E6	FB6101 B4	R6103 B2	R6117 E4	R6143 E9	R6158 E7	R6176 G4	C6108 E3	C6132 D9	C6146 C10	C6164 H5	Q6107 G4	R6114 C4	R6140 D7	R6155 E5	R6173 G6	

B16

AUDIO AMPLIFIER

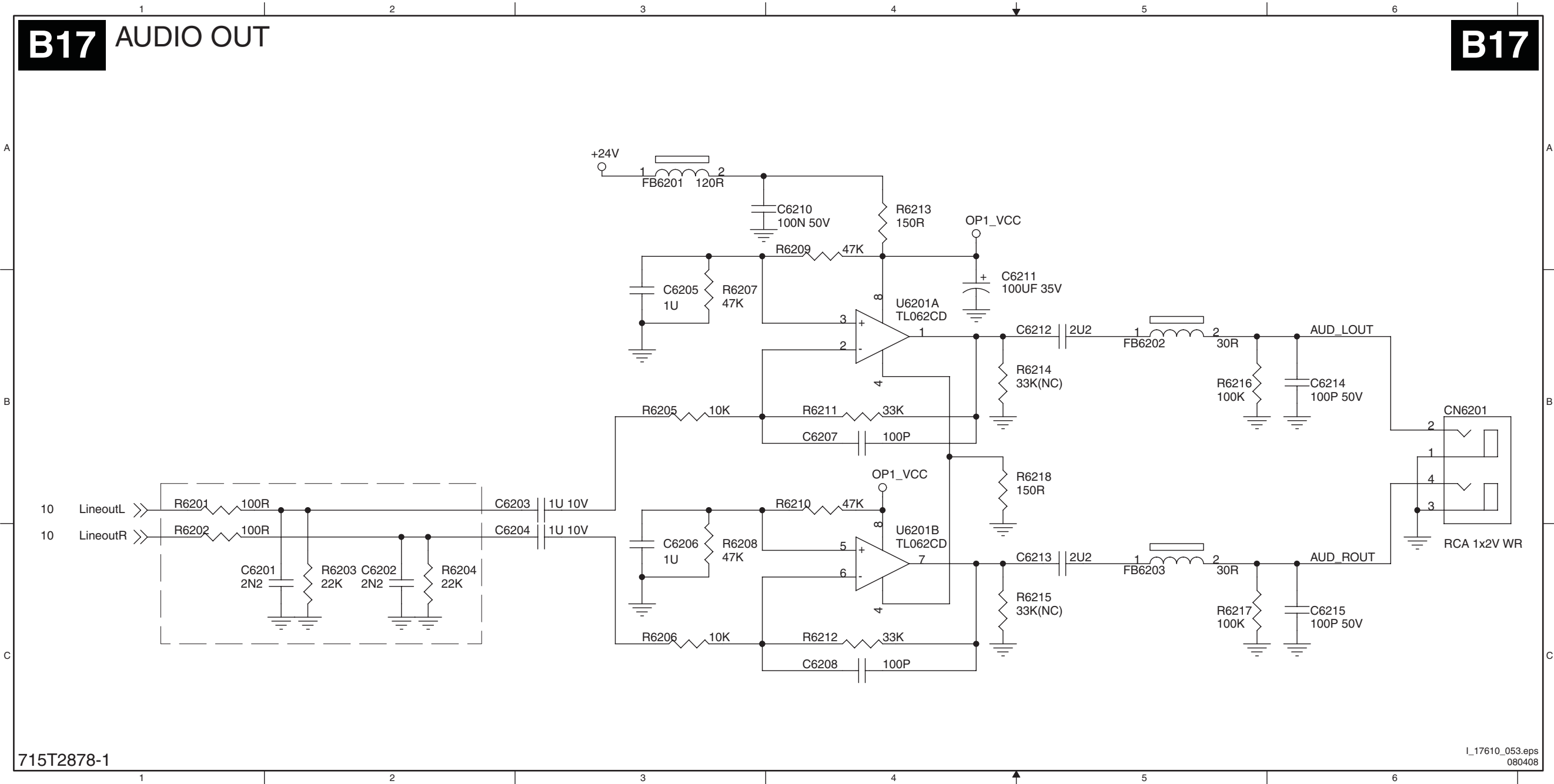
B16



SSB: Audio Out

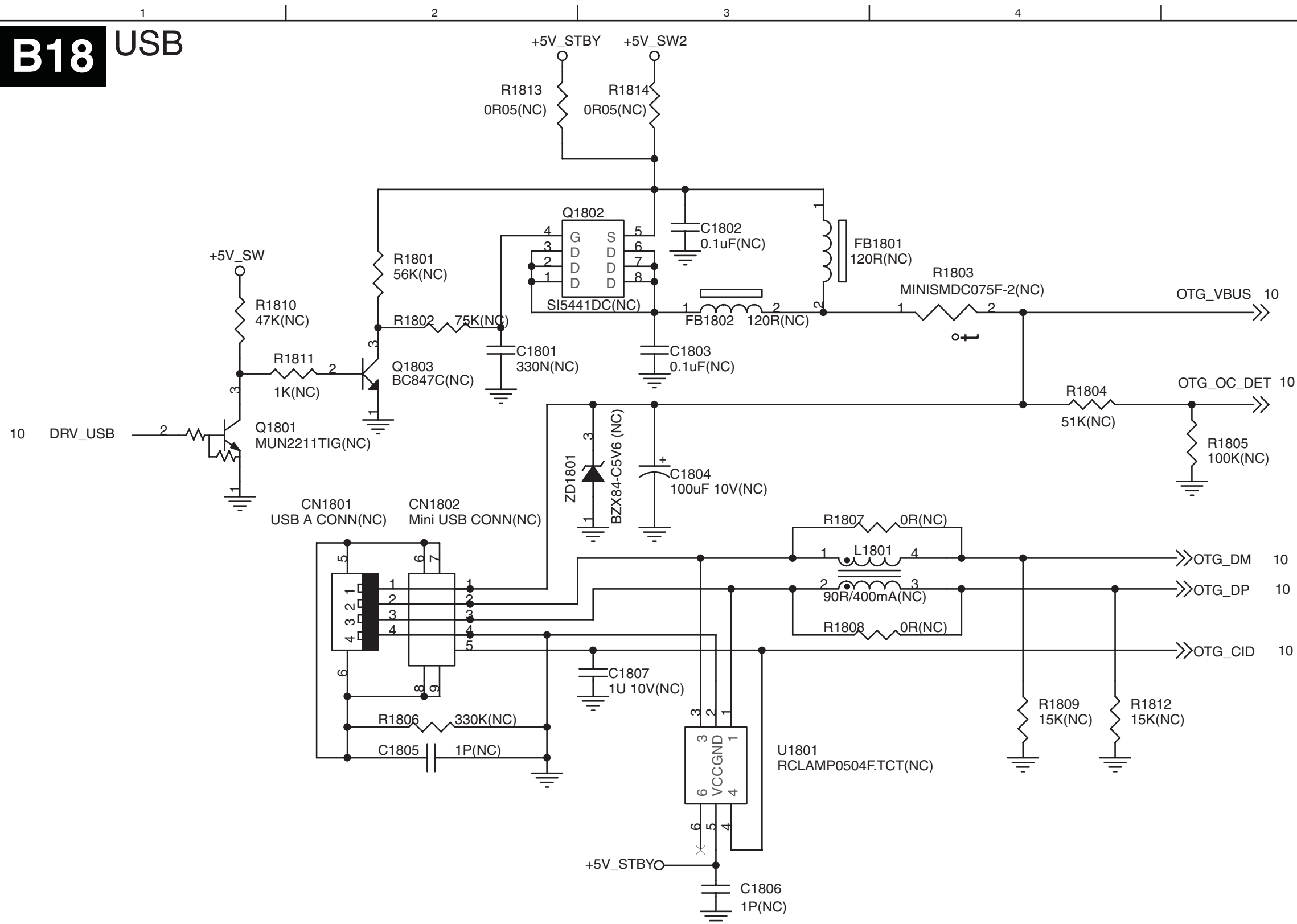
B17 AUDIO OUT

B17



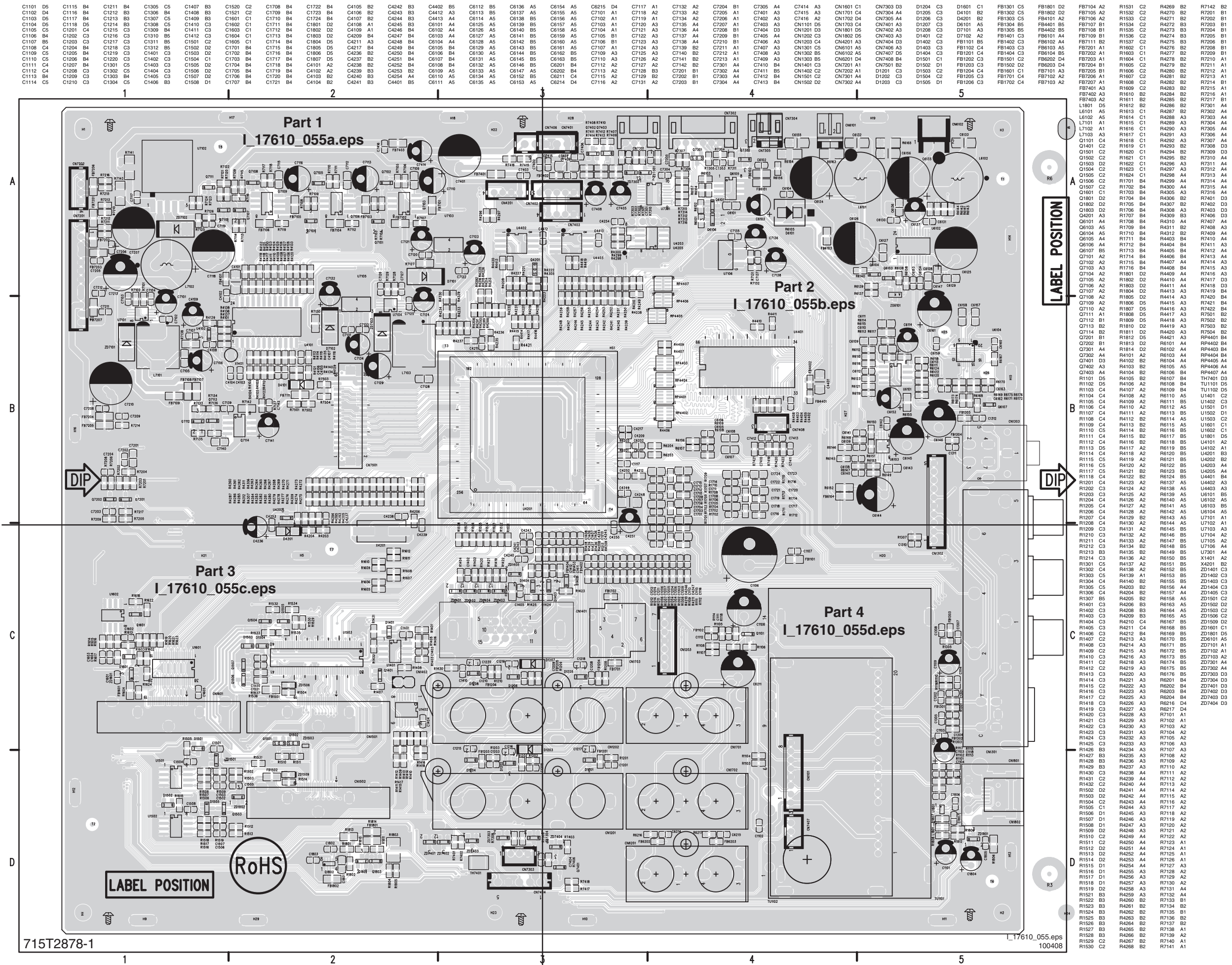
- CN6201 B6
- C6201 C2
- C6202 C2
- C6203 B3
- C6204 B3
- C6205 B3
- C6206 C3
- C6207 B4
- C6208 C4
- C6210 A3
- C6211 A4
- C6212 B5
- C6213 C5
- C6214 B6
- C6215 C6
- FB6201 A3
- FB6202 B5
- FB6203 C5
- R6201 B1
- R6202 B1
- R6203 C2
- R6204 C2
- R6205 B3
- R6206 C3
- R6207 A3
- R6208 B3
- R6209 A4
- R6210 B4
- R6211 B4
- R6212 C4
- R6213 A4
- R6214 B4
- R6215 C4
- R6216 B5
- R6217 C5
- R6218 B4
- U6201A B4
- U6201B C4

SSB: USB

B18 USB**B18**

CN1801 C2
CN1802 C2
C1801 B2
C1802 A3
C1803 B3
C1804 B3
C1805 C2
C1806 D3
C1807 C2
FB1801 A3
FB1802 A3
L1801 B3
Q1801 B1
Q1802 A2
Q1803 B2
R1801 A2
R1802 B2
R1803 B4
R1804 B4
R1805 B4
R1806 C2
R1807 B3
R1808 C3
R1809 C4
R1810 B1
R1811 B1
R1812 C4
R1813 A2
R1814 A3
U1801 C3
ZD1801 B2

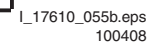
Layout Small Signal Board (Overview Top Side)



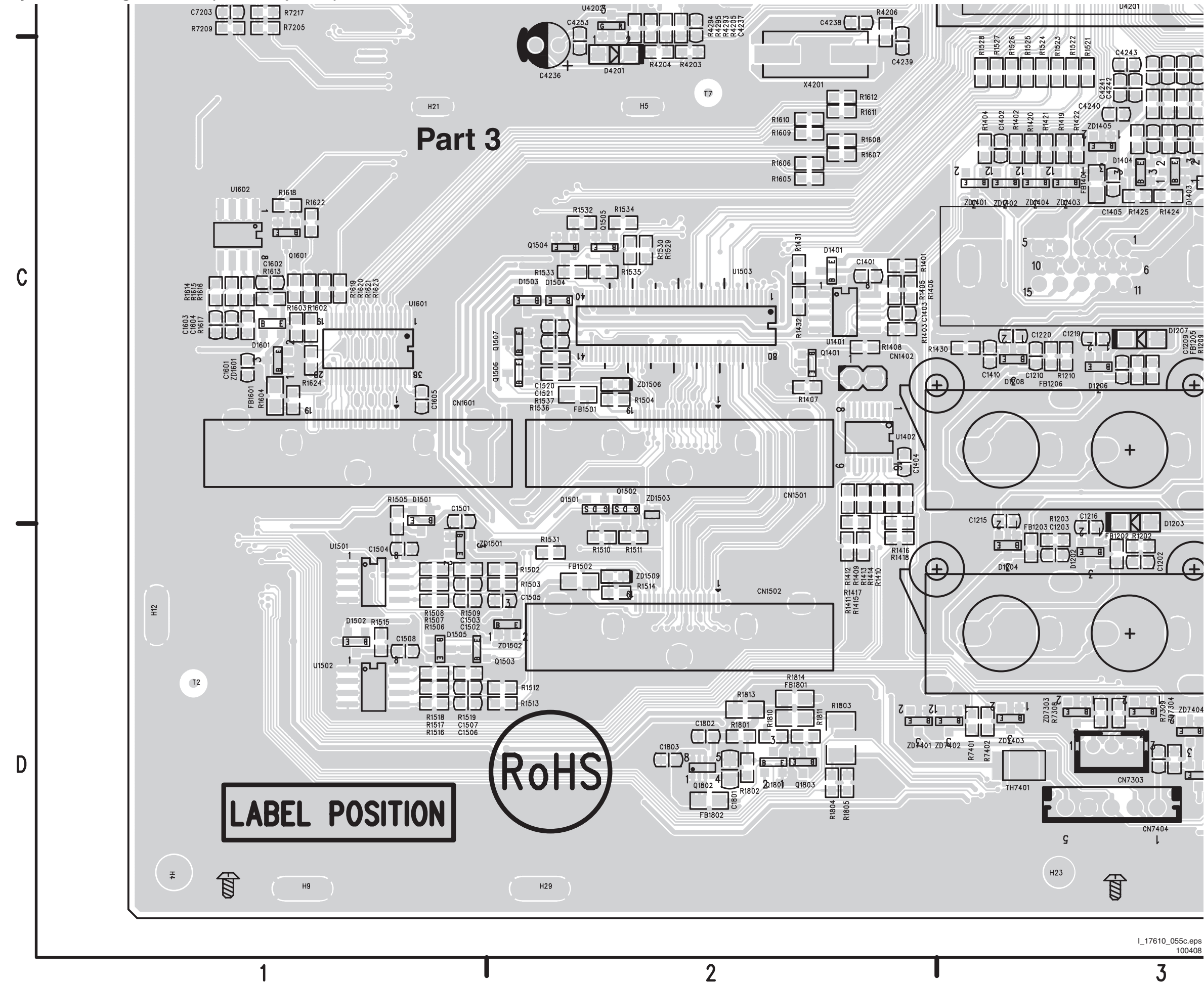
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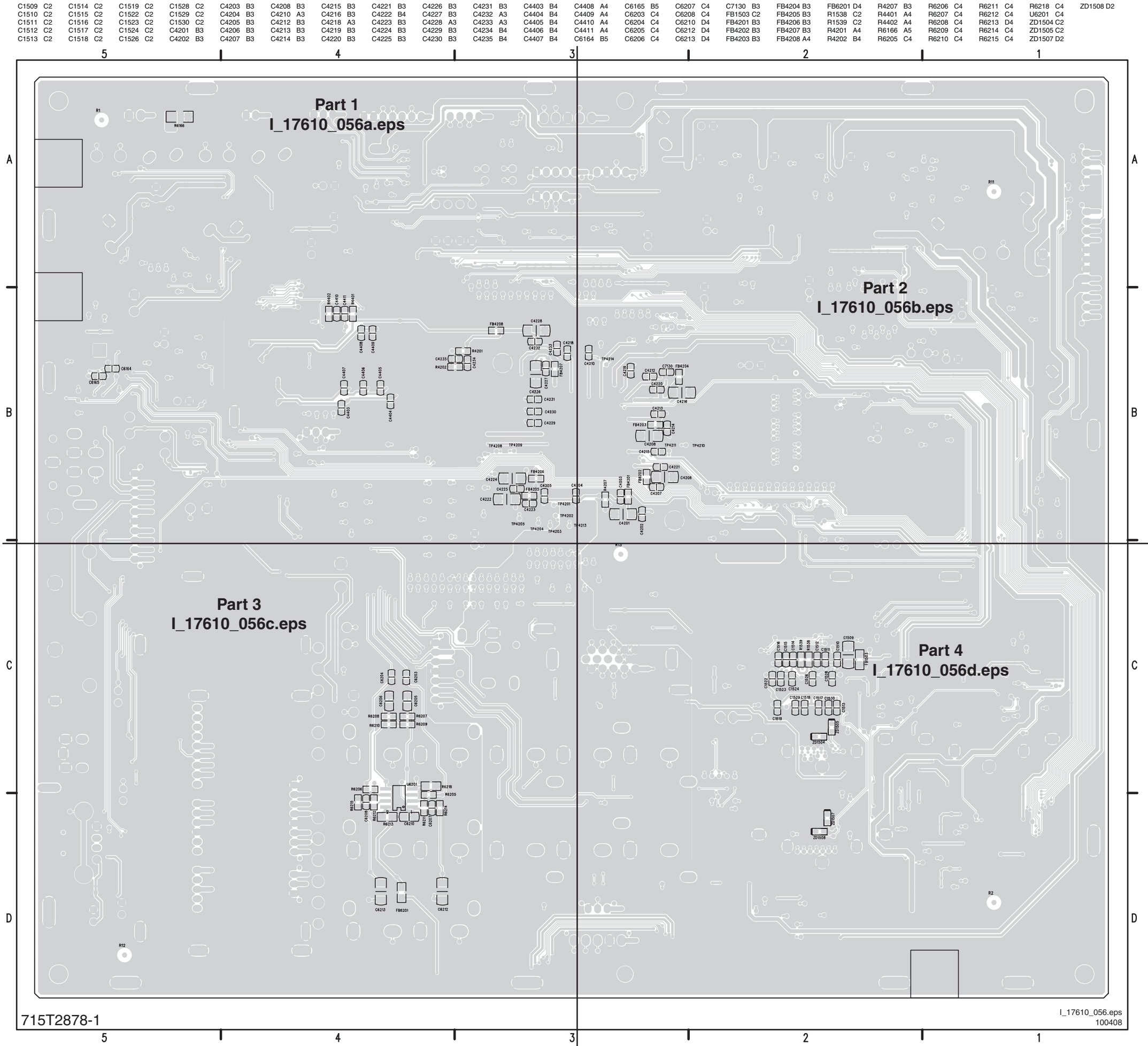
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Layout Small Signal Board (Part 3 Top Side)



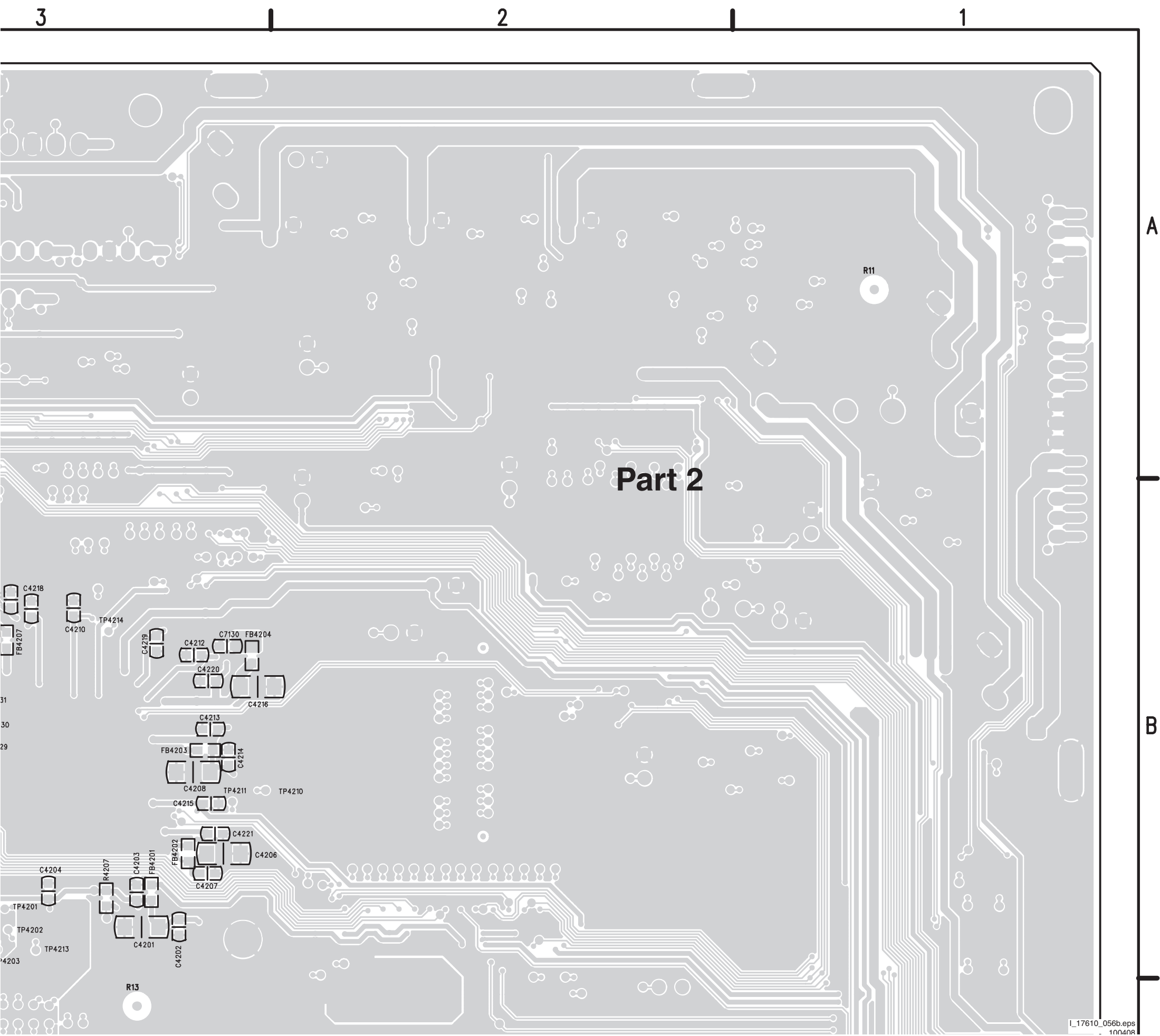
Layout Small Signal Board (Overview Bottom Side)



3



Layout Small Signal Board (Part 2 Bottom Side)

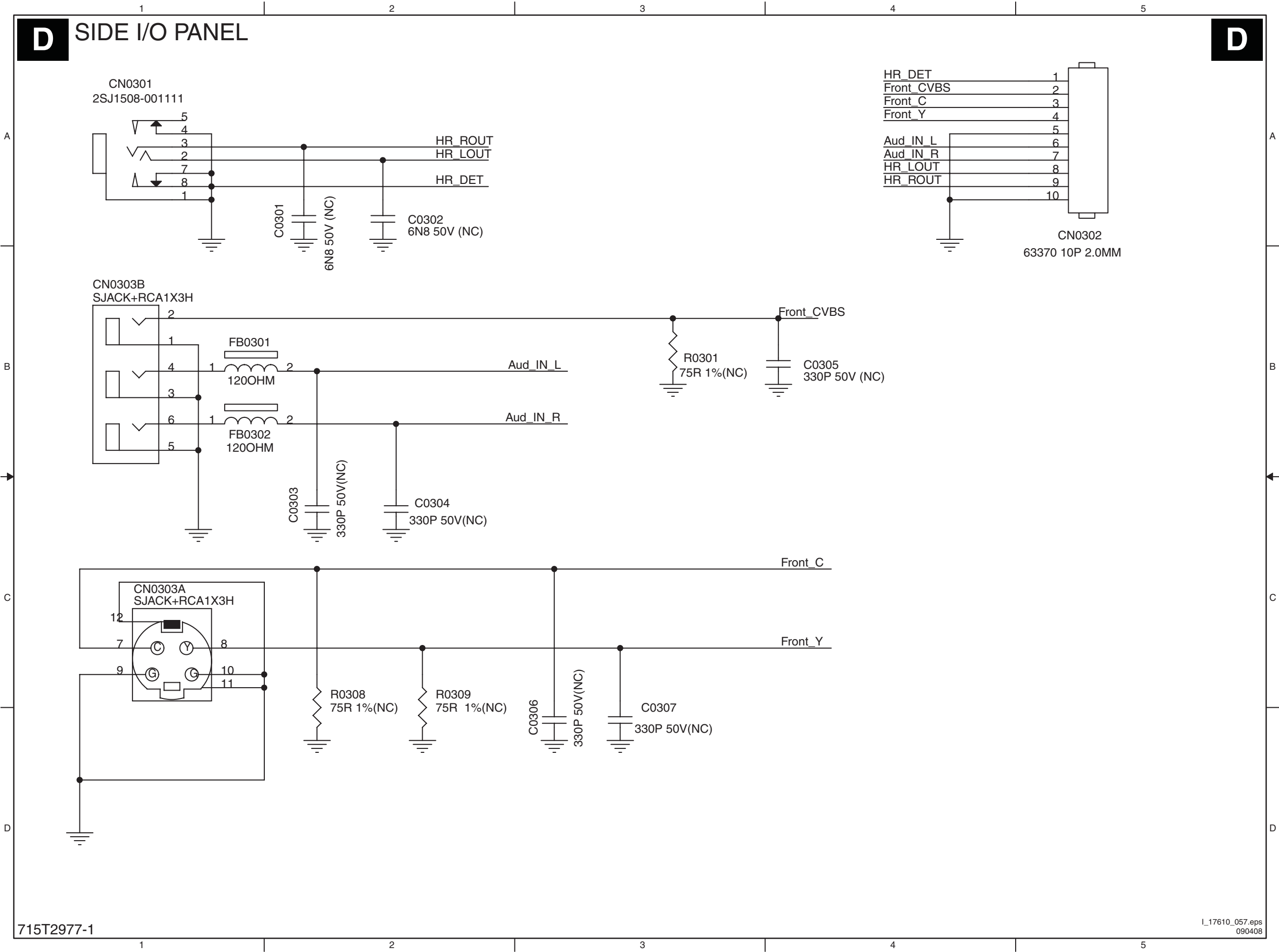


D



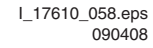
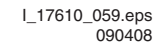
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Side I/O Panel

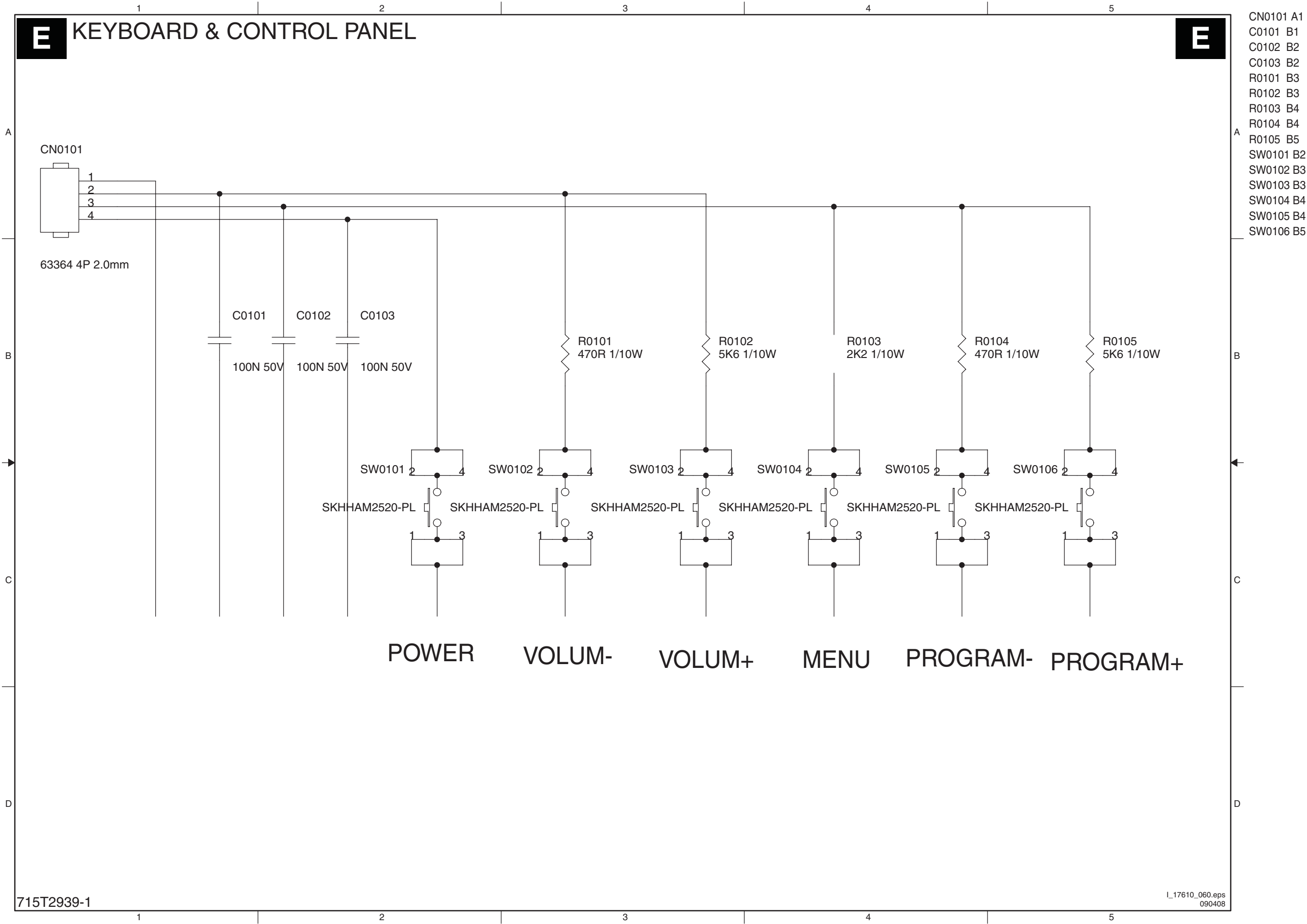


CN0301 A1
CN0302 A5
N0303A C1
N0303B B1
C0301 A2
C0302 A2
C0303 C2
C0304 C2
C0305 B3
C0306 C3
C0307 C3
FB0301 B1
FB0302 B1
R0301 B3
R0308 C2
R0309 C2

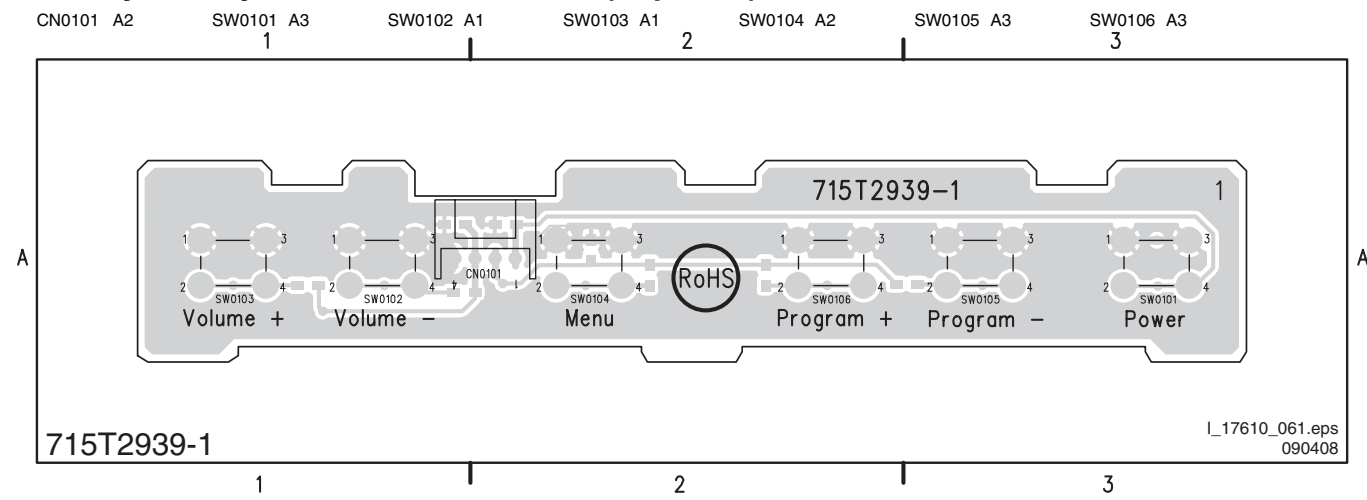
CN0301 A2 CN0302 A1 CN0303 A1

[illegible][illegible]

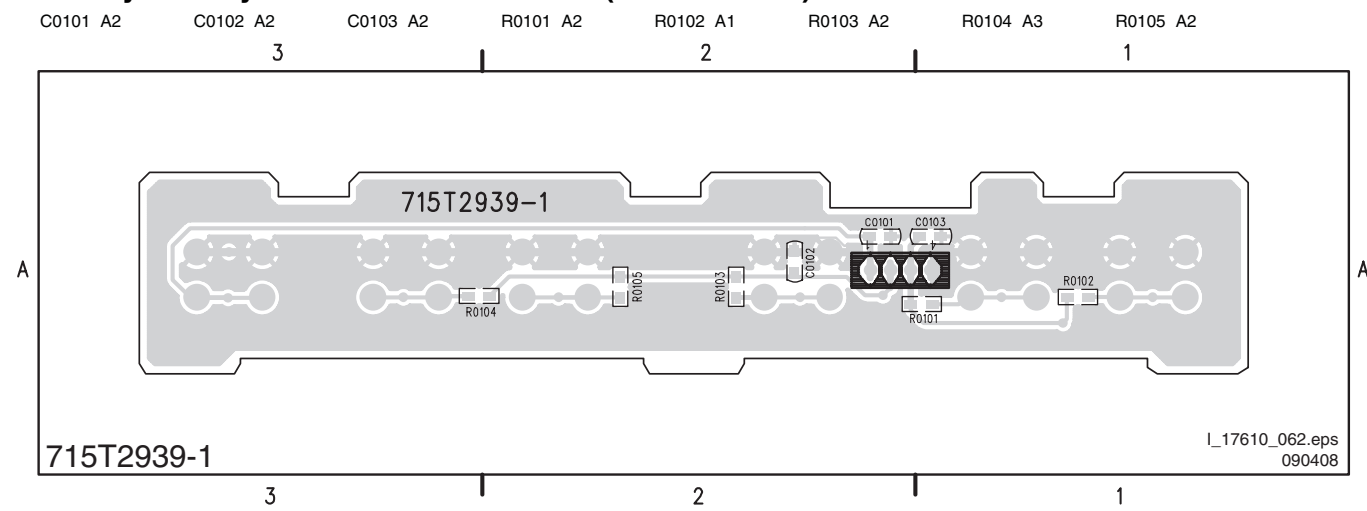
Keyboard & Control Panel



Layout Keyboard & Control Panel (Top Side)

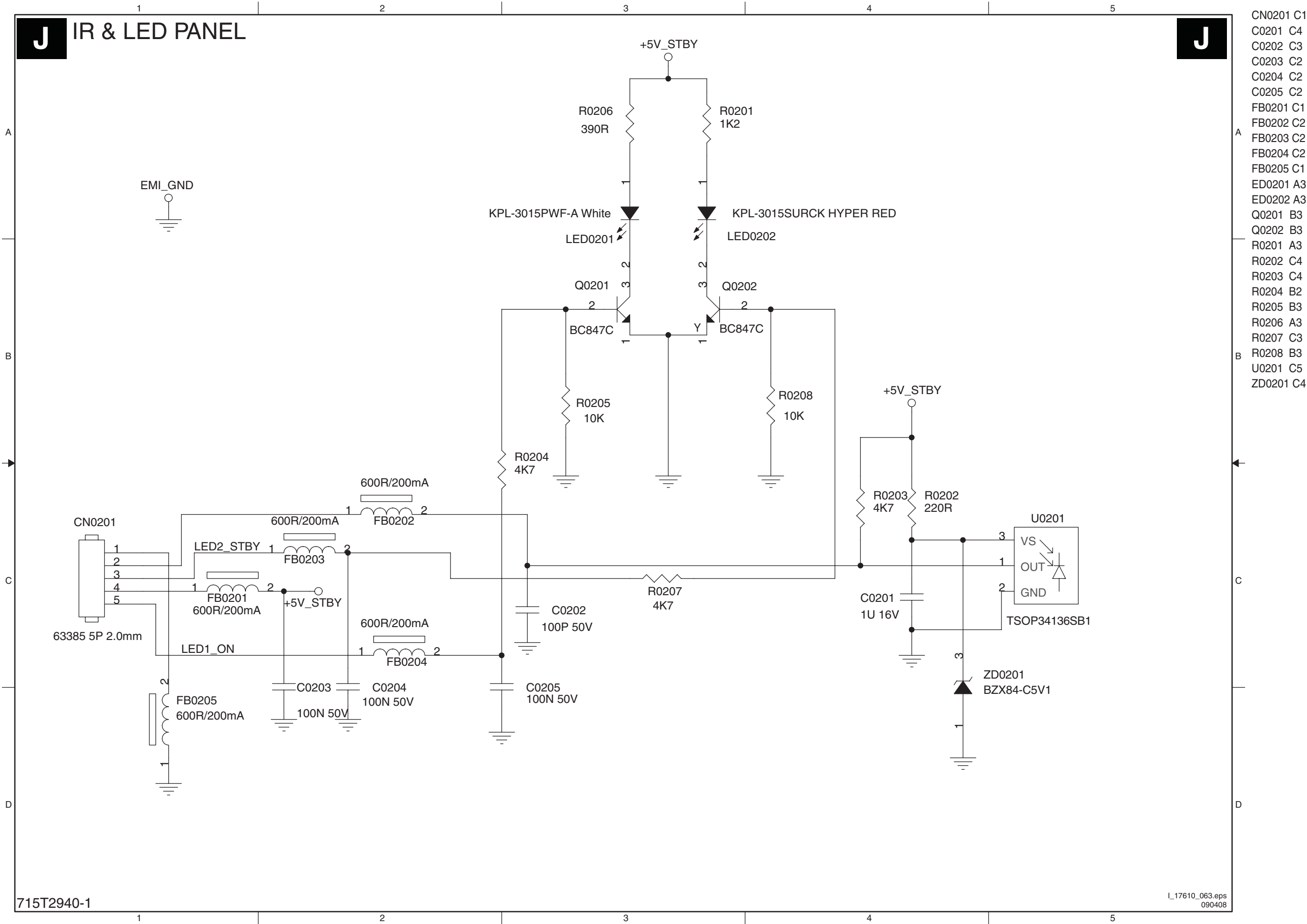


Layout Keyboard & Control Panel (Bottom Side)



Personal Notes:

IR & LED Panel



This image shows a full page of blank, lined paper. It features approximately 30 evenly spaced horizontal grey lines across the entire width of the page. The lines are thin and consistent in color and thickness. There are no margins, text, or other markings present on the paper.

8. Alignments

Index of this chapter:

- 8.1 Electrical Alignments
- 8.2 Serial Number Definition

Note:

The Service Modes are described in chapter 5. Menu navigation is done with the CURSOR UP, DOWN, LEFT or RIGHT keys of the remote control transmitter.

8.1 Electrical Alignments

8.1.1 White Balance Adjustment (PC Mode)

Equipment Requirements: Colour analyser.

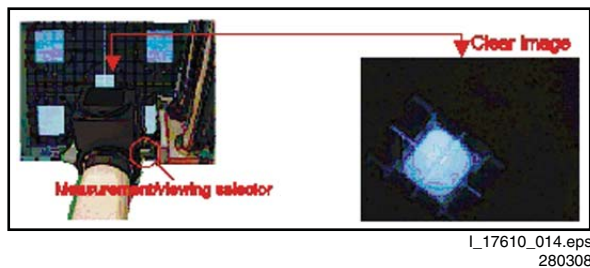


Figure 8-1 Colour analyser

Access the "Factory" mode (RS232) in auto-alignment system. The communication protocol switches to RS232.

Input Signal Type: PC signal

In "Factory" mode, apply 1360x768/60Hz with TVBAR100 pattern and set "brightness" and "contrast" to 50%. Activate AUTO-COLOR function for auto ADC offset and gain setup.

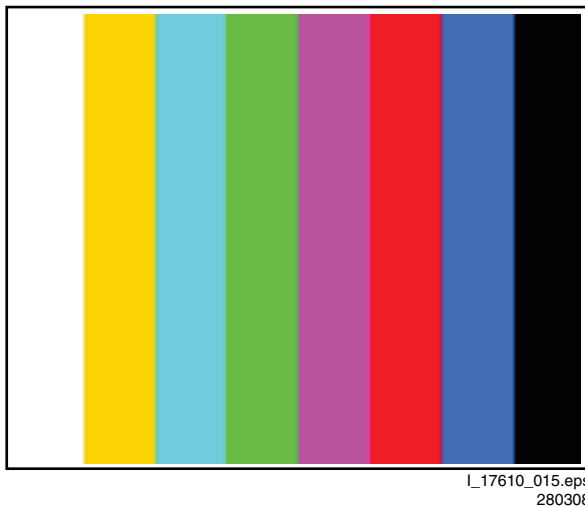


Figure 8-2 TVBAR100

Colour Temp Alignment:

Apply a 1360x768/60Hz signal with white pattern, set "brightness" at 100%, and "contrast" at 50%. Adjust the R, G, and B Sub-Gain for the screen centre. The 1931 CIE chromaticity (x, y) co-ordinates shall be:

Table 8-1 Reading With Minolta CA-210

	Normal (9300K)	Cool (11500K)	Warm (6500K)
x	0.289 +/- 0.015	0.278 +/- 0.015	0.314 +/- 0.015
y	0.291 +/- 0.015	0.278 +/- 0.015	0.319 +/- 0.015

If you do not have a CA-210, the following R, G, and B values are for your reference.

Table 8-2 Reference Value of R, G, and B

	Normal (9300K)	Cool (11500K)	Warm (6500K)
R	120	120	120
G	102	102	100
B	100	107	87

Luminance > 400 cd/m2 in the centre of the screen when both "contrast" and "brightness" are set to 100%. This group setting about colour temperature is also applied in HDMI1/HDMI2/CVI1/CVI2/AV/SideAV/PC. It means that all use the same setting.

Display quality adjustment:

Use timing mode as described in 2.2, and uses the POPO (Pixel On Pixel Off) pattern to adjust the clock until no stripe and adjust the phase until clear picture. (AUTO ADJUST hot key: press VOLUME n and VOLUME + keys together for 1 second). Check all six preset modes. Check the analogue interface cable. Check the colour poor and noise condition of 64 gray scale pattern.

8.1.2 White-D Adjustment (Comp. Mode)

Apply 1080i/50Hz and the pattern TVBAR100 (see figure 8-2).

Alignment method:

Set Smart picture as "Personal" (Brightness= 50, Color= 50, Contrast= 50);

Access the factory OSD first, then enable AUTO-COLOR to get Comp ADC OFFSET and Comp ADC GAIN. Check if 64 gray scales can be distinguished.

Colour Temp Alignments: Check chromaticity (x, y) co-ordinates specification as in table above. Luminance > 400 cd/m2 in the centre of the screen in RICH mode.

8.2 Serial Number Definition

BOM Code:

Table 8-3 Panel type

PANEL SUPPLIER	Code
AU	1
CPT	2
LPL(LG)	3
QDI	4
CMO	5
HSD	6
SVA	7

9. Circuit Descriptions, Abbreviation List, and IC Data Sheets

Index of this chapter:

- 9.1 Introduction
- 9.2 Block Diagram
- 9.3 Abbreviation List
- 9.4 IC Data Sheets

Notes:

- Only **new** circuits (circuits that are not published recently) are described.
- Figures can deviate slightly from the actual situation, due to different set executions.

9.1 Introduction

This chassis supports PC analogue input up to WXGA resolution, and supports TV (RF) for all China (/93) and AP (/98) systems: PAL B/G, PAL D/K, PAL I, SECAM B/G, SECAM D/K, NTSC M, YC, CVBS, YPbPr, HDMI and PC signal input from SDTV to HDTV (480i/p, 576i/p, 720p, 1080i/p).

The platform is also designed for the lowest power consumption in off/stand-by mode (<0.3W) to fulfil new Philips CE environment policy requirement.

It uses two main ICs: MST98981CLD (One Chip LCD-TV Controller) and WT6702F (Stand-by MCU). The MST98981 is one chip LCD-TV controller which has embedded ADC for HD/ Analogue D-sub input, ITU656/601 digital port for digital data input, SD ADC for CVBS/YC input, video decoder, audio decoder, TXT decoder, Micro controller, OSD engine, and up/ down scaler.

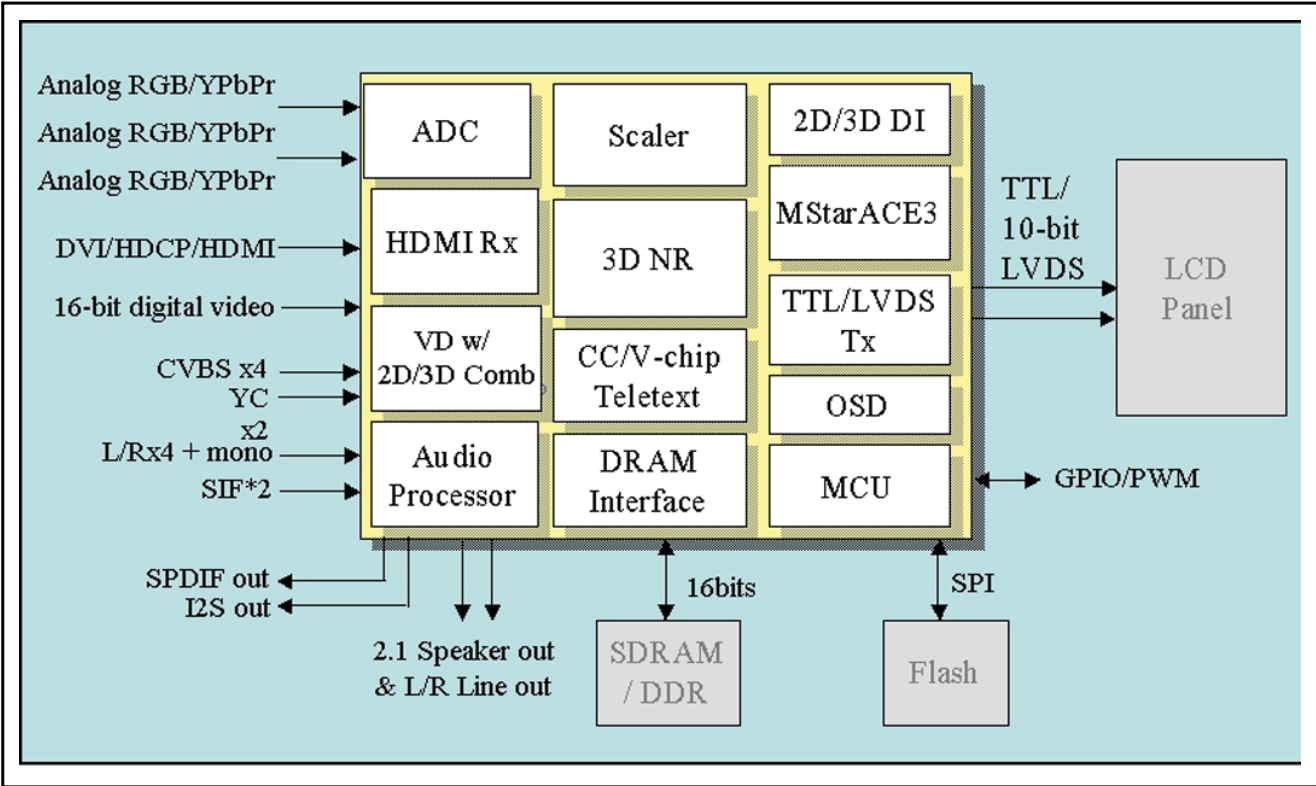
For displaying, it will connect the LVDS signal interface to the WXGA panel via an LVDS cable. The WT6702F is mainly for TV stand-by remaining function during off/stand-by mode. When the TV set enters to off/stand-by mode, the MST98981 will be totally shut down and remains only the WT6702F to meet the lowest power consumption.

The MST98981 is a high performance and fully integrated IC for multi-function LCD TV/Monitor with resolutions up to SXGA/ WXGA+1440x900. It is configured with an integrated triple ADC/PLL, an integrated DVI/HDCP/HDMI receiver, a multi-standard TV video and audio decoder, a video de-interlacer, a scaling engine, the MStarACE-3 colour engine, an on-screen display controller, an 8-bit MCU, and a built-in output panel interface. With an external frame buffer, 3D video decoding and processing are fulfilled for high-quality TV applications. The MST98981CLD also integrates intelligent power management control capability for green-mode requirements and spread-spectrum support for EMI management

The MST98981CLD embeds the 3D motion de-interlace to generate smooth picture quality for motion. A 3D comb filter also recovers high details for still pictures. The special colour processing technology provides favourite and natural colours.

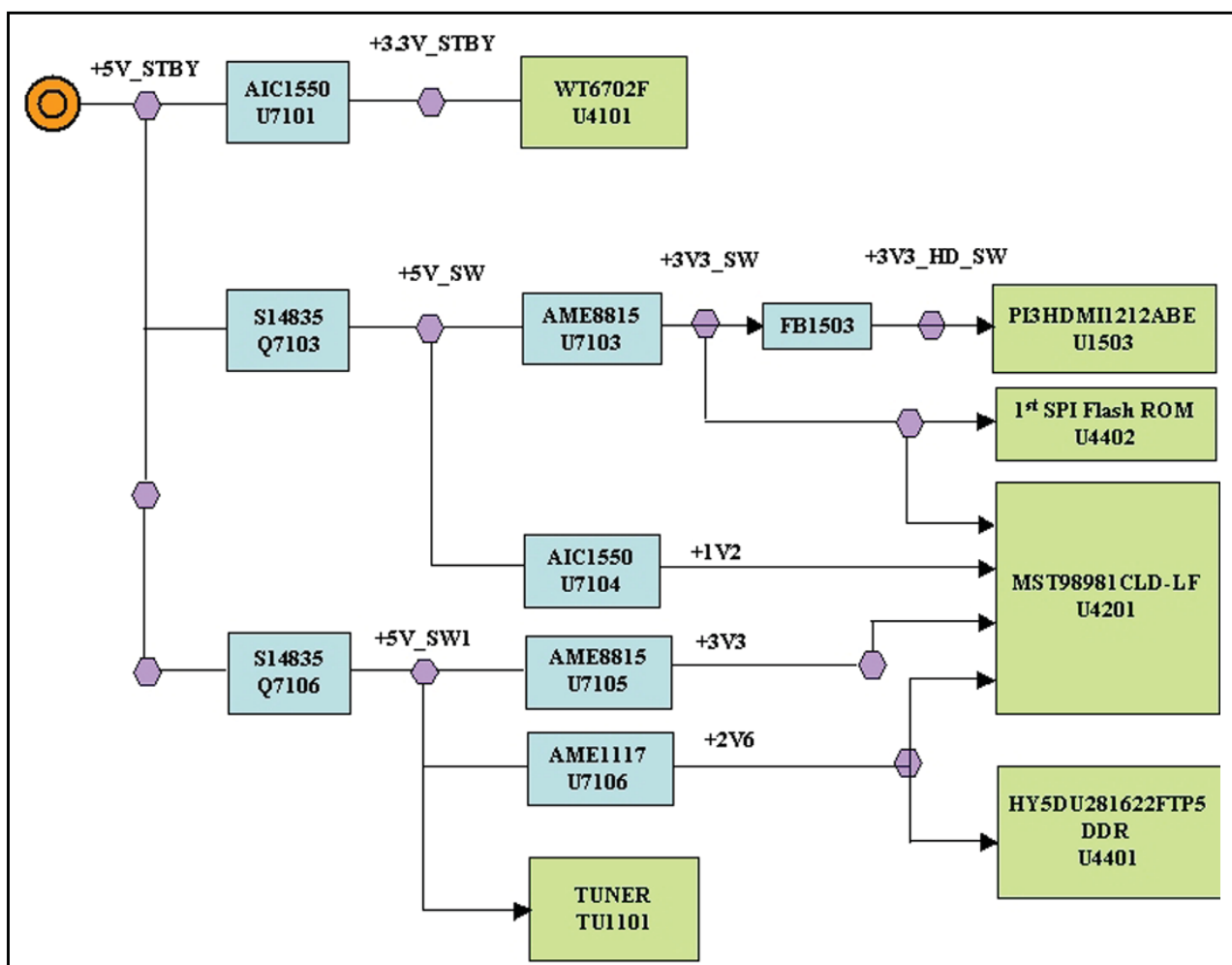
The WT6702F is a micro controller for system power management with Turbo 8051 compatible (3T) CPU, flash memory, SRDAM, 2 PWMs, DPMS detector, 2 timer and UART, 3 slave IIC interface, 4 channel 8-bit A/D converter, real time clock, watch-dog timer, embedded ISP, power down mode and embedded ICE mode.

9.2 Block Diagram



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Figure 9-1 Function diagram MST98980/1



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280308

Figure 9-2 Power management

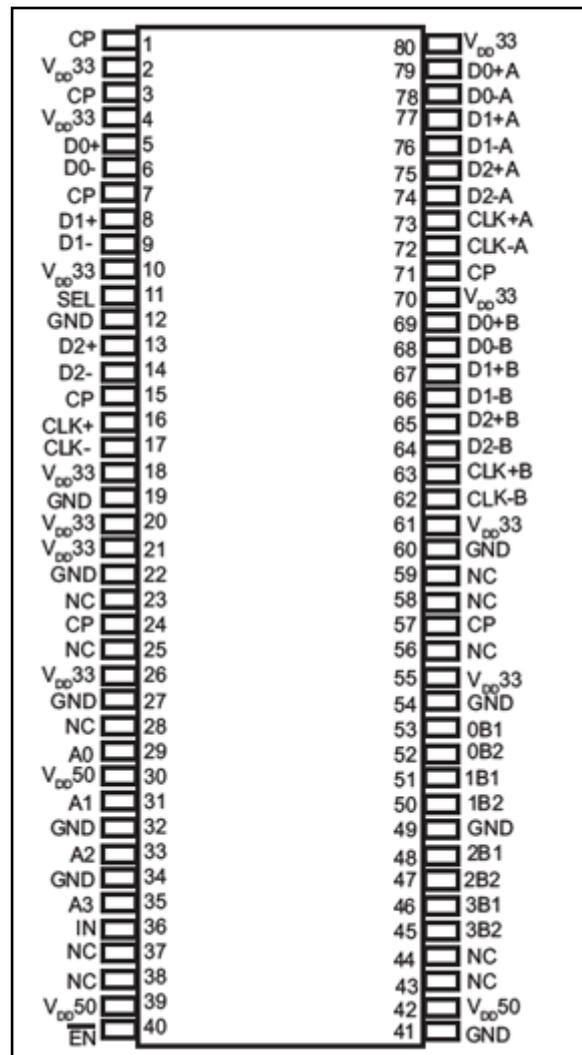
9.3 Abbreviation List

1080i	1080 visible lines, interlaced	FBL-SC2-IN	Fast blanking signal for SCART2 in
1080p	1080 visible lines, progressive scan	FBL-TXT	Fast Blanking Teletext
2CS	2 Carrier Sound	FLASH	FLASH memory
2DNR	Spatial (2D) Noise Reduction	FM	Field Memory / Frequency Modulation
3DNR	Temporal (3D) Noise Reduction	FMR	FM Radio
480i	480 visible lines, interlaced	FRC	Frame Rate Converter
480p	480 visible lines, progressive scan	FRONT-C	Front input chrominance (SVHS)
AARA	Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeping up the original aspect ratio	FRONT-DETECT	Front input detection
ACI	Automatic Channel Installation: algorithm that installs TV channels directly from a cable network by means of a predefined TXT page	FRONT-Y_CVBS	Front input luminance or CVBS (SVHS)
ADC	Analogue to Digital Converter	FTV	Flat TeleVision
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency	G-SC1-IN	Green SCART1 in
AGC	Automatic Gain Control: algorithm that controls the video input of the feature box	G-SC2-IN	Green SCART2 in
AM	Amplitude Modulation	G-TXT	Green teletext
AUO	Acer Unipack Optonics	H	H_sync to the module
AP	Asia Pacific	HD	High Definition: 720p, 1080i, 1080p
AR	Aspect Ratio: 4 by 3 or 16 by 9	HDMI	High Definition Multimedia Interface, digital audio and video interface
ASD	Automatic Standard Detection	HP	Head Phone
AV	Audio Video	I	Monochrome TV system. Sound carrier distance is 6.0 MHz
B-SC1-IN	Blue SCART1 in	I2C	Integrated IC bus
B-SC2-IN	Blue SCART2 in	I2S	Integrated IC Sound bus
B-TXT	Blue teletext	IC	Integrated Circuit
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz	IF	Intermediate Frequency
BTSC	Broadcast Television System Committee	Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker.
C-FRONT	Chrominance front input	IR	Infra Red
CBA	Circuit Board Assembly (or PWB)	IRQ	Interrupt ReQuest
CL	Constant Level: audio output to connect with an external amplifier	Last Status	The settings last chosen by the customer and read and stored in RAM or in the NVM. They are called at start-up of the set to configure it according the customers wishes
CLUT	Colour Look Up Table	LATAM	LATIn AMerica
ComPair	Computer aided rePair	LC04	Philips chassis name for LCD TV 2004 project
CSM	Customer Service Mode	LCD	Liquid Crystal Display
CVBS	Composite Video Blanking and Synchronisation	LED	Light Emitting Diode
CVBS-EXT	CVBS signal from external source (VCR, VCD, etc.)	L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
CVBS-INT	CVBS signal from Tuner	LPL	LG Philips LCD
CVBS-MON	CVBS monitor signal	LS	Loud Speaker
CVBS-TER-OUT	CVBS terrestrial out	LVDS	Low Voltage Differential Signalling, data transmission system for high speed and low EMI communication.
DAC	Digital to Analogue Converter	M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz
DBE	Dynamic Bass Enhancement: extra low frequency amplification	MOSFET	Metal Oxide Semiconductor Field Effect Transistor
DFU	Directions For Use: owner's manual	MPEG	Motion Pictures Experts Group
DNR	Dynamic Noise Reduction	MSP	Multi-standard Sound Processor: ITT sound decoder
DRAM	Dynamic RAM	MUTE	MUTE Line
DSP	Digital Signal Processing	NAFTA	North American Free Trade Association: Trade agreement between Canada, USA and Mexico
DST	Dealer Service Tool: special (European) remote control designed for service technicians	NC	Not Connected
DTS	Digital Theatre Sound	NICAM	Near Instantaneous Compounded Audio Multiplexing. This is a digital sound system, used mainly in Europe.
DVD	Digital Versatile Disc	NTSC	National Television Standard Committee. Colour system used mainly in North America and Japan. Colour carrier NTSC M/N = 3.579545 MHz, NTSC 4.43 = 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
DVI	Digital Visual Interface	NVM	Non Volatile Memory: IC containing TV related data (for example, options)
DW	Double Window	O/C	Open Circuit
ED	Enhanced Definition: 480p, 576p		
EEPROM	Electrically Erasable and Programmable Read Only Memory		
EU	EUrope		
EXT	EXTERNAL (source), entering the set by SCART or by cinches (jacks)		
FBL	Fast Blanking: DC signal accompanying RGB signals		
FBL-SC1-IN	Fast blanking signal for SCART1 in		

ON/OFF LED	On/Off control signal for the LED	VCR	Video Cassette Recorder
OSD	On Screen Display	VGA	Video Graphics Array
PAL	Phase Alternating Line. Colour system used mainly in Western Europe (colour carrier = 4.433619 MHz) and South America (colour carrier PAL M = 3.575612 MHz and PAL N = 3.582056 MHz)	WD	Watch Dog
		WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
PC	Personal Computer	XTAL	Quartz crystal
PCB	Printed Circuit Board (or PWB)	YPbPr	Component video (Y= Luminance, Pb/Pr= Colour difference signals B-Y and R-Y, other amplitudes w.r.t. to YUV)
PDP	Plasma Display Panel	Y/C	Video related signals: Y consists of luminance signal, blanking level and sync; C consists of colour signal.
PIG	Picture In Graphic		Luminance-signal
PIP	Picture In Picture	Y-OUT	Baseband component video (Y= Luminance, U/V= Colour difference signals)
PLL	Phase Locked Loop. Used, for example, in FST tuning systems. The customer can directly provide the desired frequency	YUV	
Progressive Scan	Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution.		
PWB	Printed Wiring Board (or PCB)		
RAM	Random Access Memory		
RC	Remote Control transmitter		
RC5 (6)	Remote Control system 5 (6), the signal from the remote control receiver		
RGB	Red, Green, and Blue. The primary colour signals for TV. By mixing levels of R, G, and B, all colours (Y/C) are reproduced.		
RGBHV	Red, Green, Blue, Horizontal sync, and Vertical sync		
ROM	Read Only Memory		
SAM	Service Alignment Mode		
SC	SandCastle: two-level pulse derived from sync signals		
SC1-OUT	SCART output of the MSP audio IC		
SC2-B-IN	SCART2 Blue in		
SC2-C-IN	SCART2 chrominance in		
SC2-OUT	SCART output of the MSP audio IC		
S/C	Short Circuit		
SCL	Clock signal on I2C bus		
SD	Standard Definition: 480i, 576i		
SDA	Data signal on I2C bus		
SDI	Samsung Display Industry		
SDM	Service Default Mode		
SDRAM	Synchronous DRAM		
SECAM	SEquence Couleur Avec Memoire. Colour system used mainly in France and Eastern Europe. Colour carriers = 4.406250 MHz and 4.250000 MHz		
SIF	Sound Intermediate Frequency		
SMPS	Switch Mode Power Supply		
SND	SouND		
SNDL-SC1-IN	Sound left SCART1 in		
SNDL-SC1-OUT	Sound left SCART1 out		
SNDL-SC2-IN	Sound left SCART2 in		
SNDL-SC2-OUT	Sound left SCART2 out		
SNDR-SC1-IN	Sound right SCART1 in		
SNDR-SC1-OUT	Sound right SCART1 out		
SNDR-SC2-IN	Sound right SCART2 in		
SNDR-SC2-OUT	Sound right SCART2 out		
SNDS-VL-OUT	Surround sound left variable level out		
SNDS-VR-OUT	Surround sound right variable level out		
SOPS	Self Oscillating Power Supply		
S/PDIF	Sony Philips Digital InterFace		
SRAM	Static RAM		
STBY	Stand-by		
SVHS	Super Video Home System		
SW	Sub Woofer / SoftWare		
THD	Total Harmonic Distortion		
TXT	TeleteXT		
uP	Microprocessor		
VL	Variable Level out: processed audio output toward external amplifier		

Figure 9-3 Pin configuration

9.4.2 Diagram B2A, P13HDMI1212_A



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Figure 9-4 Pin configuration

9.4.3 Diagram B3A, WT6702F

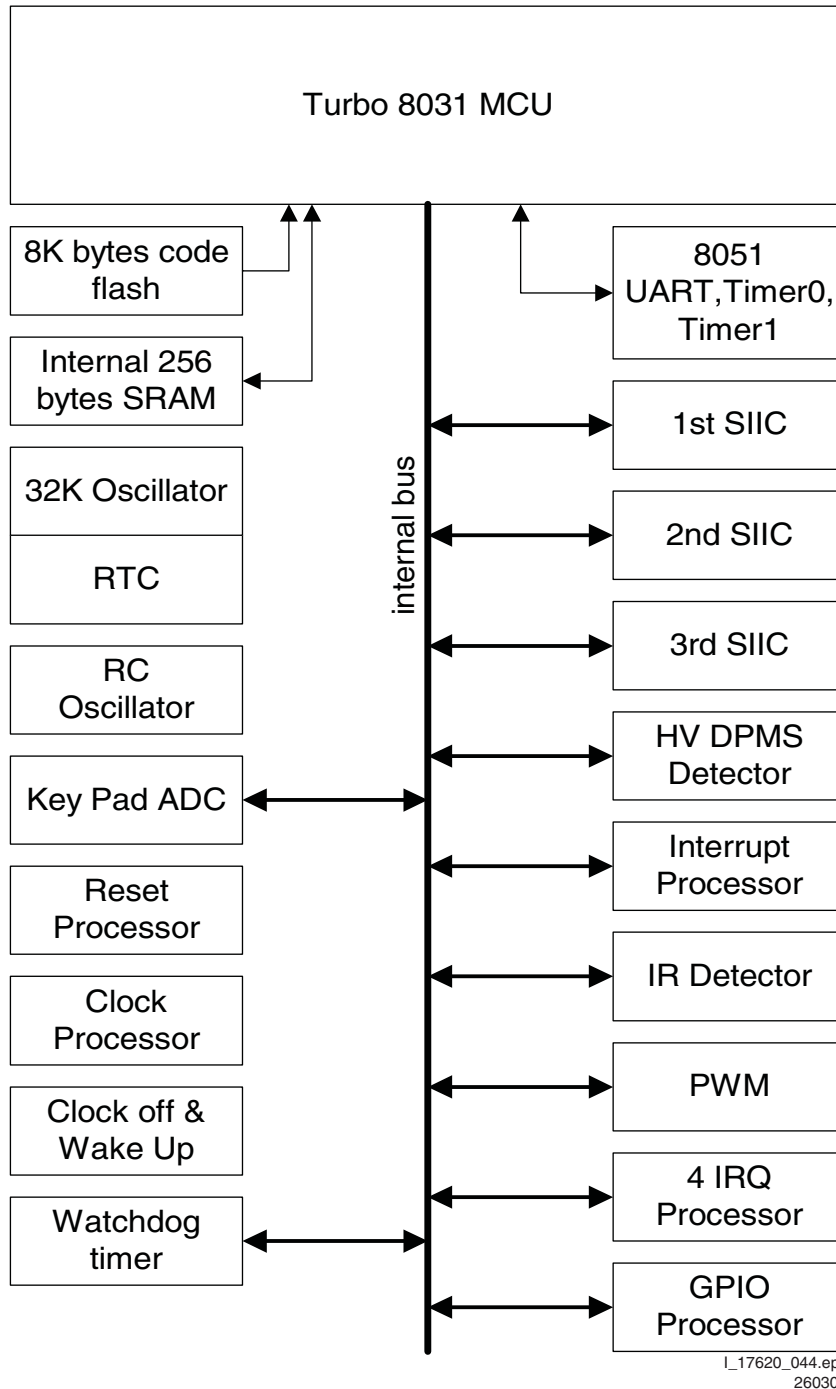
Block Diagram

Figure 9-5 Function block diagram

10. Spare Parts List

Sets Listed per Model Number (CTN)

42PFL3403/93

1050	9965 100 14103	Panel LC420WXE-SAA1 LPL KOREA
1053	9965 100 14192	SCALER PCB ASSY
1054	9965 100 14109	POWER PCB ASSY
1056	9965 100 14236	IR PCB ASSY
1057	9965 100 14239	KEY BOARD ASSY
1185	9965 100 14083	SPEAKER 6OHM 10W 46x155mm
1185	9965 100 14084	SPEAKER 6OHM 10W 456x155mm
1186	9965 100 14083	SPEAKER 6OHM 10W 46x155mm
1186	9965 100 14084	SPEAKER 6OHM 10W 456x155mm
8801	9965 100 14085	Cable 2P 400mm 75170
8802	9965 100 14086	Cable 2P 960mm 75171
8803	9965 100 14092	Cable 30P-15*2P 510mm 75164
8804	9965 100 14088	Cable 3P-2P 770mm 75166
8805	9965 100 14087	Cable 3P-2P 470mm 75165
8806	9965 100 14089	Cable 4P-4P 970mm 75168
8807	9965 100 14090	Cable 7P-5P 1050mm 75167
8808	9965 100 14091	Cable 12P-12P 200mm 75169

47PFL3403/93

1050	9965 100 14705	Panel LC470WXN-SAA1 LPL KOREA
1053	9965 100 14800	SCALER PCB ASSY
1054	9965 100 14709	POWER PCB ASSY
1055	9965 100 14803	SIDE AV PCB ASSY
1056	9965 100 14236	IR PCB ASSY
1057	9965 100 14239	KEY BOARD ASSY
1185	9965 100 14691	SPEAKER 8OHM 10W 46x155mm
1185	9965 100 14692	SPEAKER 8OHM 10W 45x155mm
1186	9965 100 14691	SPEAKER 8OHM 10W 46x155mm
1186	9965 100 14692	SPEAKER 8OHM 10W 45x155mm
8801	9965 100 14693	Cable 2P 670mm 75162
8802	9965 100 14694	Cable 2P 1020mm 75163
8803	9965 100 14700	Cable 30P-15*2P 480mm 75156
8804	9965 100 14698	Cable 13P-12P 900mm 75158
8805	9965 100 14699	Cable 14P-13P 260mm 75157
8806	9965 100 14695	Cable 4P-4P 970mm 75161
8807	9965 100 14696	Cable 7P-5P 1200mm 75160
8808	9965 100 14697	Cable 12P-12P 240mm 75159
8809	9965 100 06770	Cable 10P-10P 170mm 75103

Main Power Supply Panel 42" [A]

Various

F901	9965 100 07543	Fuse 5A 250V
F901	9965 100 14138	FUSE 5A 250V LITTELFUSE 215005
FB901	9965 100 03349	FERRITE BEAD
FB902	9965 100 03349	FERRITE BEAD
FB905	9965 100 07438	Bead coil
FB905	9965 100 07439	Bead coil
FB906	9965 100 14082	BEAD 3.5*6*0.8
FB907	9965 100 07268	BEAD HCB3216KF-800T30 bullwill
FB907	9965 100 07269	80R/3000mA HCB3216KF-800T30
SG901	9965 100 03566	SURGE PROTECT GS41-201MA A
SG902	9965 100 03566	SURGE PROTECT GS41-201MA A
SG903	9965 100 03566	SURGE PROTECT GS41-201MA A
SG904	9965 100 03566	SURGE PROTECT GS41-201MA A
ZD808	9965 000 36079	RLZ 5.6B LLDS
ZD808	9965 100 04051	RLZ5.6B
ZD901	9965 100 14070	DIODE RLZ8.2B
ZD903	9965 000 36079	RLZ 5.6B LLDS
ZD903	9965 100 04051	RLZ5.6B
ZD908	9965 000 43895	RLZ15B
ZD908	9965 100 14179	RLZ15B
ZD924	9965 100 14180	P6KE13A-E3
ZD924	9965 100 14182	ZD P6KE13A
ZD925	9965 100 06270	ZENER DIODE RLZ13B SEMTECH
ZD925	9965 100 14069	RLZ 13B LLDS
ZD926	9965 100 13119	RLZ20B LLDS
ZD926	9965 100 14178	RLZ20B

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C801	9965 100 14186	CAP DMPE 100N 450V 10%
C802	9965 100 14117	CAP MPP 470NF 500V 5%
C806	9965 000 43408	CAP CHIP 0805 2N2 50V X7R /-1
C807	9965 000 36049	15PF 5% SL 6KV
C808	9965 000 43408	CAP CHIP 0805 2N2 50V X7R /-1
C809	9965 000 36049	15PF 5% SL 6KV
C810	9965 100 06267	CHIP 2.2UF 16V X7R 0805
C812	9965 000 43409	33nF 10% 50V 0805
C814	9965 100 14174	CAP 0805 5N6 50V X7R +/-10%

C814	9965 100 14175	CAP 0805 5N6 50V X7R +/-10%
C815	9965 000 43406	100nF 10% 25V 0805
C815	9965 000 43407	100nF 10% 50V 0805
C816	9965 000 42264	1µF 16V 0805
C816	9965 000 42696	1µF 10% 25V 0805
C817	9965 000 42264	1µF 16V 0805
C817	9965 100 14173	CAP 0805 1U 25V X7R +/-10%
C818	9965 000 36994	330pF 50V 0805
C818	9965 000 44873	330pF 50V
C820	9965 100 06267	CHIP 2.2UF 16V X7R 0805
C821	9965 000 43407	100nF 10% 50V 0805
C821	9965 100 14172	CAP 0805 100N 50V X7R +/-10%
C822	9965 000 43407	100nF 10% 50V 0805
C822	9965 100 14171	CAP 0805 100N 50V X7R +/-5%
C841	9965 000 43406	100nF 10% 25V 0805
C841	9965 000 43407	100nF 10% 50V 0805
C842	9965 000 43406	100nF 10% 25V 0805
C842	9965 000 43407	100nF 10% 50V 0805
C843	9965 000 43406	100nF 10% 25V 0805
C843	9965 000 43407	100nF 10% 50V 0805
C844	9965 000 44615	1nF 10% 50V 0805
C844	9965 100 14170	CAP 0805 1N 50V NPO +/-5%
C845	9965 000 43884	220pF 50V 0805
C845	9965 000 44246	220pF 5% 50V
C847	9965 100 06267	CHIP 2.2UF 16V X7R 0805
C854	9965 000 42264	1µF 16V 0805
C854	9965 100 11579	1UF +10% 16V X7R
C901	9965 000 43824	470pF 10% 250VAC
C901	9965 100 02733	470pF 10% 250V AC
C901	9965 100 13037	470PF +10% 250VAC
C902	9965 000 43824	470pF 10% 250VAC
C902	9965 100 02733	470pF 10% 250V AC
C902	9965 100 13037	470PF +10% 250VAC
C903	9965 100 14118	3300PF 250VAC/400VAC
C903	9965 100 14119	CER CAP 3300PF M 250VAC
C904	9965 100 14118	3300PF 250VAC/400VAC
C904	9965 100 14119	CER CAP 3300PF M 250VAC
C907	9965 100 14120	EC 150uF 450V HS 30x31mm
C907	9965 100 14121	EC 150uF 450V LSG 30x30mm
C907	9965 100 14127	EC 150uF 450V 30*31mm
C908	9965 100 09805	0.68uF +10%
C908	9965 100 14116	CAP X2 0.68U 275V MKP
C909	9965 000 43821	0.47µF 275VAC
C909	9965 100 07384	0.47UF +-10%
C909	9965 100 14115	0.47UF 275VAC ARCO
C911	9965 000 44617	1uF 5% 450V
C911	9965 000 44618	1uF 5% 450V
C912	9965 000 42696	1µF 10% 25V 0805
C912	9965 100 11678	CHIP 1UF 25V X7R 0805
C913	9965 000 43884	220pF 50V 0805
C913	9965 100 14176	CAP 220PF 25V X7R 0805
C914	9965 000 43405	10nF -10% 50V
C914	9965 100 11672	CHIP 0.01UF 25V X7R 0805
C915	9965 000 42696	1µF 10% 25V 0805
C915	9965 100 11678	CHIP 1UF 25V X7R 0805
C916	9965 000 43405	10nF -10% 50V
C916	9965 100 11559	CHIP 0.01UF 50V X7R
C917	9965 000 42696	1µF 10% 25V 0805
C917	9965 100 11678	CHIP 1UF 25V X7R 0805
C918	9965 000 44874	CAP 0.33UF -10% 25V X7R 0805
C918	9965 100 14177	CAP 0.33UF 50V X7R 0805
C920	9965 000 42696	1µF 10% 25V 0805
C920	9965 100 11678	CHIP 1UF 25V X7R 0805
C921	9965 000 43907	2200pF 500V
C921	9965 000 44620	200pF 10% 500V
C922	9965 000 37773	105?J 47UF M 50V
C922	9965 000 43461	47uF 35V
C922	9965 100 14191	EC 47uF 35V RGA 6.3x11mm
C923	9965 000 45146	1.5nF 10% 50V 0805
C923	9965 100 04374	CAP 0805 1N5 50V NPO +/-5%
C926	9965 100 03584	1500pF 10% 500V
C929	9965 000 43907	2200pF 500V
C929	9965 000 44620	200pF 10% 500V
C930	9965 000 43405	10nF -10% 50V
C930	9965 100 11672	CHIP 0.01UF 25V X7R 0805
C931	9965 100 14187	C CAP. 270PF 1KV
C932	9965 000 44623	2200uF 16V
C932	9965 100 14130	CAP 2200UF 16V
C933	9965 000 44331	1000uF 35V
C933	9965 100 14129	CAP 1000UF 35V
C934	9965 100 14187	C CAP. 270PF 1KV
C935	9965 100 02755	0.022uF 25V 0805
C935	9965 100 04232	22nF -10% 50V
C937	9965 100 14189	EC 220uF 16V KM 8x12mm
C937	9965 100 14190	ELCAP RGA 16V S 220U PM20 A
C938	9965 100 14122	EC 220uF 35V KM 10x12mm
C938	9965 100 14123	EC 220uF 35V RGA 10x12mm
C938	9965 100 14124	EC 220uF 35V PF 10x12mm
C939	9965 000 43407	100nF 10% 50V 0805

C939	9965 000 44292	0.1uF 50V 0805
C940	9965 000 43407	100nF 10% 50V 0805
C940	9965 000 44292	0.1uF 50V 0805
C941	9965 000 43407	100nF 10% 50V 0805
C941	9965 000 44292	0.1uF 50V 0805
C943	9965 000 43407	100nF 10% 50V 0805
C943	9965 000 44292	0.1uF 50V 0805
C944	9965 000 43405	10nF -10% 50V
C944	9965 100 11672	CHIP 0.01UF 25V X7R 0805
C945	9965 000 43906	2200pF 500V
C945	9965 000 43907	2200pF 500V
C946	9965 100 04357	22μF 35V
C946	9965 100 14188	105C RADIALE-CAPACTOR 22uF 35V
C947	9965 100 04039	100pF 50Vp 0805
C947	9965 100 11670	CHIP 100PF 50V NPD 0805
C948	9965 000 43407	100nF 10% 50V 0805
C948	9965 000 44292	0.1uF 50V 0805
C949	9965 000 43906	2200pF 500V
C949	9965 000 43907	2200pF 500V
C950	9965 000 40057	2200uF 10V
C950	9965 100 14128	CAP 2200uF 10V 13*20mm
C951	9965 100 14125	EC CAP 105 J 470UF 16V
C951	9965 100 14126	LOW ESR EC 470UF 16V
C952	9965 000 43407	100nF 10% 50V 0805
C952	9965 000 44292	0.1uF 50V 0805
CN802	9965 100 09616	
CN803	9965 100 09616	
CN901	9965 100 13056	AC SOCKET V 3PST-01DR-BBBS3000
CN902	9965 000 43344	Connector 12p m

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R801	9965 000 43872	2.2kΩ 5% 1/8W
R802	9965 000 43380	1kΩ 1/10W
R803	9965 100 04362	4.7Ω 55 1/8W
R803	9965 100 14157	RST 4R7 1/8W 5%
R804	9965 000 43872	2.2kΩ 5% 1/8W
R805	9965 000 43380	1kΩ 1/10W
R806	9965 100 04362	4.7Ω 55 1/8W
R806	9965 100 14157	RST 4R7 1/8W 5%
R807	9965 100 11655	RST CHIPR 22 KOHM +-5% 1/8W
R810	9965 000 39749	100kΩ 0805
R811	9965 100 14151	RSTR 18 KOHM +-5% 1/8W
R812	9965 000 39749	100kΩ 0805
R813	9965 100 14151	RSTR 18 KOHM +-5% 1/8W
R814	9965 100 14160	RSTR 75 OHM +-5% 1/4W
R815	9965 000 43976	10Ω 5% 1/4W
R818	9965 100 14155	RST 39K 1/8W 5%
R818	9965 100 14156	RSTR 39KOHM +-5% 1/8W YAGEO
R819	9965 000 44860	3.3MΩ 0805
R820	9965 000 43386	150kΩ 5% 1/8W
R821	9965 000 43390	22kΩ 5% 1/8W
R822	9965 100 14160	RSTR 75 OHM +-5% 1/4W
R823	9965 100 14160	RSTR 75 OHM +-5% 1/4W
R824	9965 000 43395	33kΩ 5% 1/8W
R826	9965 100 14158	CHIP 75KOHM 1/10W
R828	9965 000 43381	10kΩ 1/10W
R830	9965 000 44978	47kΩ 1% 1/8W
R831	9965 000 43382	1MOHM 1/10W
R831	9965 100 14150	RSTR 1MOHM +-5% 1/8W YAGEO
R833	9965 000 39749	100kΩ 0805
R834	9965 000 43390	22kΩ 5% 1/8W
R851	9965 000 44861	620kΩ 5% 1/8W
R855	9965 000 43380	1kΩ 1/10W
R856	9965 000 43380	1kΩ 1/10W
R860	9965 000 43388	22Ω 1/10W
R860	9965 100 14152	RSTR 22 OHM +-5% 1/8W YAGEO
R867	9965 000 43973	10Ω 1/10W
R868	9965 100 04694	RST CHIP 220R 1/8W 5%
R870	9965 100 04383	2kΩ 5% 1/8W
R881	9965 000 43381	10kΩ 1/10W
R882	9965 000 43381	10kΩ 1/10W
R883	9965 000 43382	1MOHM 1/10W
R883	9965 100 14150	RSTR 1MOHM +-5% 1/8W YAGEO
R884	9965 000 43382	1MOHM 1/10W
R884	9965 100 14150	RSTR 1MOHM +-5% 1/8W YAGEO
R885	9965 100 04385	510kΩ 5% 1/8W
R901	9965 100 06541	RST CHIPR 510 KOHM +-5% 1/4W
R902	9965 100 06541	RST CHIPR 510 KOHM +-5% 1/4W
R903	9965 100 06541	RST CHIPR 510 KOHM +-5% 1/4W
R904	9965 100 13092	RSTR 0 OHM +-5% 1/4W
R905	9965 100 14169	RSTR 1.5 MOHM +-5% 1/4W
R906	9965 100 14169	RSTR 1.5 MOHM +-5% 1/4W
R907	9965 100 14074	1MOHM 5% 1/6W
R907	9965 100 14080	1MOHM 5% 1/6W
R908	9965 100 14159	RSTR 1 MOHM +-1% 1/4W FENGHUA
R908	9965 100 14167	RSTR 1 MOHM +-1% 1/4W
R909	9965 100 14159	RSTR 1 MOHM +-1% 1/4W FENGHUA
R909	9965 100 14167	RSTR 1 MOHM +-1% 1/4W
R911	9965 100 14163	RST 18K7 1/8W 1%
R912	9965 100 11649	RST CHIPR 100 KOHM +-5% 1/8W
R913	9965 000 44297	10kΩ 5% 1/8W
R914	9965 100 05559	RST CHIPR 39 KOHM +-5% 1/8W

R914	9965 100 14156	RSTR 39KOHM +-5% 1/8W YAGEO
R915	9965 100 12255	RST CHIPR 22 OHM +-5% 1/8W
R916	9965 100 14166	RSTR 4.7 OHM +-5% 1/8W
R917	9965 000 44294	47Ω 5% 1/8W
R918	9965 100 02493	47kΩ 5% 1/8W
R919	9965 100 14111	RST MOFR 0.3 OHM +-5% 2WS
R919	9965 100 14114	0.3 OHM 5% 2W
R920	9965 100 14111	RST MOFR 0.3 OHM +-5% 2WS
R920	9965 100 14114	0.3 OHM 5% 2W
R921	9965 100 12256	RST CHIPR 3.3 KOHM +-5% 1/8W
R921	9965 100 13086	RSTR 3.3KOHM +-5% 1/8W YAGEO
R922	9965 100 13075	RSTR 12 KOHM +-5% 1/8W
R923	9965 100 14110	RST 82KOHM +-5% 1W
R924	9965 100 14076	RST MOF 0R36 5% 1W
R925	9965 100 11655	RST CHIPR 22 KOHM +-5% 1/8W
R926	9965 000 44297	10kΩ 5% 1/8W
R927	9965 100 11645	RST CHIPR 10 OHM +-5% 1/8W
R928	9965 100 11655	RST CHIPR 22 KOHM +-5% 1/8W
R929	9965 100 11655	RST CHIPR 22 KOHM +-5% 1/8W
R930	9965 100 11648	RST CHIPR 1KOHM +-5% 1/4W
R931	9965 100 14075	680 OHM 5% 1/6W
R931	9965 100 14081	680OHM 5% 1/6W
R932	9965 000 44297	10kΩ 5% 1/8W
R934	9965 100 11664	RST CHIPR 4.7 KOHM +-5% 1/8W
R935	9965 100 11668	RST CHIPR 100 OHM +-5% 1/4W
R936	9965 100 11668	RST CHIPR 100 OHM +-5% 1/4W
R937	9965 100 11648	RST CHIPR 1KOHM +-5% 1/4W
R938	9965 100 11651	RST CHIPR 1.5 KOHM +-5% 1/8W
R939	9965 100 13071	RSTR 100 OHM +-5% 1/8W
R940	9965 100 11664	RST CHIPR 4.7 KOHM +-5% 1/8W
R941	9965 100 14154	RSTR 2.61 KOHM +-1% 1/8W
R942	9965 100 11668	RST CHIPR 100 OHM +-5% 1/4W
R943	9965 100 11668	RST CHIPR 100 OHM +-5% 1/4W
R944	9965 100 14165	RSTR 2.2 KOHM +-5% 1/8W
R945	9965 000 44297	10kΩ 5% 1/8W
R946	9965 100 11648	RST CHIPR 1KOHM +-5% 1/4W
R947	9965 100 02493	47kΩ 5% 1/8W
R948	9965 100 11655	RST CHIPR 22 KOHM +-5% 1/8W
R949	9965 100 11646	RST CHIPR 10 KOHM +-1% 1/8W
R950	9965 100 14168	RSTR 1 KOHM +-5% 1/4W
R951	9965 000 44294	47Ω 5% 1/8W
R952	9965 100 11655	RST CHIPR 22 KOHM +-5% 1/8W
R953	9965 100 14073	100OHM +- 5% 1/6W
R953	9965 100 14079	100OHM 5% 1/6W
R954	9965 100 14077	470OHM 5% 1/4W
R954	9965 100 14078	RST CFR 47R 1/4W 5%
R955	9965 100 11644	RST CHIPR 0 OHM +-5% 1/8W
R956	9965 100 11646	RST CHIPR 10 KOHM +-1% 1/8W
R956	9965 100 14161	RSTR 10KOHM +-1% 1/8W YAGEO
R957	9965 100 14162	RSTR 15.4KOHM +-1% 1/8W
R959	9965 100 11667	RST CHIPR 10 OHM +-5% 1/4W
R960	9965 100 14153	RSTR 22KOHM +-1% 1/8W YAGEO
R960	9965 100 14164	RSTR 22KOHM +-1% 1/8W YAGEO
R961	9965 100 14165	RSTR 2.2 KOHM +-5% 1/8W
R962	9965 100 14169	RSTR 1.5 MOHM +-5% 1/4W
R963	9965 100 11664	RST CHIPR 4.7 KOHM +-5% 1/8W
RV901	9965 100 13029	VARISTOR 560V TVR14561KFC4FY
RV902	9965 100 14112	VARISTOR 510V TVR10511KFC4A94Y

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L901	9965 100 14131	LINE FILTER 10mH3.5A HJC-S5086
L901	9965 100 14132	LINE FILTER 10mH3.5A HJC-S5086
L902	9965 000 43848	Line Filter 6mH 2.0A
L902	9965 100 07539	Coil 6mH 1.8A
L907	9965 000 40058	0.8μH
L907	9965 100 11621	IND CHOKE 0.8uH MIN LITAI
L921	9965 000 40058	0.8μH
L921	9965 100 11621	IND CHOKE 0.8uH MIN LITAI
L922	9965 000 40058	0.8μH
L922	9965 100 11621	IND CHOKE 0.8uH MIN LITAI
T801	9965 100 14134	DRIVER XFRM 1050uH420mohm EE16
T803	9965 100 14137	XFMR 13mH YS04170249
T901	9965 100 14136	XFMR 1200uH PPH7013AL
T902	9965 100 14133	CHOKE 300uH 123mohm QPH7007AL
T904	9965 100 14135	XFMR 970uH PPH7019AL
TH901	9965 100 14113	NTC 1R5/5A SCK101R55LGY

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D801	9965 000 43891	MLL4148 SMD
D801	9965 100 03321	LL4148-GSO8
D801	9965 100 07271	LL4148
D801	9965 100 14067	DIODE LL4148PT Mini-Melf
D802	9965 000 43891	MLL4148 SMD
D802	9965 100 03321	LL4148-GSO8
D802	9965 100 07271	LL4148
D802	9965 100 14067	DIODE LL4148PT Mini-Melf
D803	9965 000 43891	MLL4148 SMD
D803	9965 100 03321	LL4148-GSO8
D803	9965 100 07271	LL4148
D803	9965 100 14067	DIODE LL4148PT Mini-Melf

D804	9965 000 43891	MLL4148 SMD
D804	9965 100 03321	LL4148-GSO8
D804	9965 100 07271	LL4148
D804	9965 100 14067	DIODE LL4148PT Mini-Melf
D805	9965 100 14139	DIODE 31DF6-FC
D805	9965 100 14141	DIODE 3A 600V 31GF6 DO-201AD
D806	9965 100 14139	DIODE 31DF6-FC
D806	9965 100 14141	DIODE 3A 600V 31GF6 DO-201AD
D810	9965 000 35995	BAV70
D810	9965 100 07221	DIODE BAV70PT SOT-23 CHENMKO
D811	9965 100 14071	DIO SSM5819SPT SOD-123 CHENMKO
D812	9965 100 14072	DIODE 3A/100V B3100B SMB
D813	9965 100 14072	DIODE 3A/100V B3100B SMB
D814	9965 100 14071	DIO SSM5819SPT SOD-123 CHENMKO
D827	9965 000 43891	MLL4148 SMD
D827	9965 100 03321	LL4148-GSO8
D827	9965 100 07271	LL4148
D827	9965 100 14067	DIODE LL4148PT Mini-Melf
D828	9965 000 43891	MLL4148 SMD
D828	9965 100 03321	LL4148-GSO8
D828	9965 100 07271	LL4148
D828	9965 100 14067	DIODE LL4148PT Mini-Melf
D901	9965 000 43857	STTH5L06FP
D902	9965 000 43437	UF1007 1A 1000V
D902	9965 100 04358	BYV26EGP 1A 1000V
D910	9965 100 03321	LL4148-GSO8
D910	9965 100 07271	LL4148
D910	9965 100 14067	DIODE LL4148PT Mini-Melf
D910	9965 100 14068	MLL4148
D913	9965 100 14068	MLL4148
D914	9965 100 12259	DIODE P6KE180A DO-15
D914	9965 100 14183	DIODE P6KE180A DO-15
D915	9965 000 43437	UF1007 1A 1000V
D915	9965 100 04358	BYV26EGP 1A 1000V
D916	9965 000 45156	RGP10D
D916	9965 100 03578	DIO REC RGP10D A (GULF) A
D916	9965 100 13139	RGP10D
D921	9965 000 36957	SP10100
D921	9965 000 40064	MBRF10H100CT ITO-220AB
D921	9965 100 07249	DIODE MBRF10100CT 10A/100V
D922	9965 100 14140	Diode EGP30D
D923	9965 100 04449	BAV21
D923	9965 100 14184	DIODE BAV21 VISHAY



IC801	9965 000 36059	0Z9938
IC901	9965 100 11636	IC TEA1530AT/N2 SO-8 PHILIPS
IC902	9965 000 44633	SG6961
IC903	9965 000 36055	PC123Y22FZOF
IC903	9965 000 40055	PC123 Y82FZOF
IC903	9965 100 11602	TCET1103G
IC904	9965 000 36055	PC123Y22FZOF
IC904	9965 000 40055	PC123 Y82FZOF
IC904	9965 100 11602	TCET1103G
IC905	9965 100 13027	IC TNY277PN DIP-8C
IC907	9965 000 36055	PC123Y22FZOF
IC907	9965 000 40055	PC123 Y82FZOF
IC907	9965 000 40056	TCET1103G
IC908	9965 000 43441	TL431ACZ
IC908	9965 100 14185	KIA431A-AT/P
IC921	9965 000 43441	TL431ACZ
IC921	9965 100 14185	KIA431A-AT/P
Q801	9965 100 04225	2SK2996
Q801	9965 100 13057	TRA 10A/500V STP11NK50ZFP
Q802	9965 100 04225	2SK2996
Q802	9965 100 13057	TRA 10A/500V STP11NK50ZFP
Q803	9965 100 14146	MMBT2907AK FAIRCHILD SOT-23
Q804	9965 100 14146	MMBT2907AK FAIRCHILD SOT-23
Q805	9965 000 35967	KEC 2N3906S-RTK/PS
Q805	9965 100 02478	PMBS3906
Q820	9965 000 42650	2N7002
Q820	9965 000 44975	RK7002
Q820	9965 100 14147	FET 2N7002ESPT 0.3A/60V SOT-23
Q821	9965 000 42650	2N7002
Q821	9965 000 44975	RK7002
Q821	9965 100 14147	FET 2N7002ESPT 0.3A/60V SOT-23
Q822	9965 000 42650	2N7002
Q822	9965 000 44975	RK7002
Q822	9965 100 14147	FET 2N7002ESPT 0.3A/60V SOT-23
Q830	9965 100 02429	PMBS3904
Q830	9965 100 14145	PMBS3904
Q831	9965 000 42650	2N7002
Q831	9965 000 44975	RK7002
Q831	9965 100 14147	FET 2N7002ESPT 0.3A/60V SOT-23
Q832	9965 000 35967	KEC 2N3906S-RTK/PS
Q832	9965 100 02478	PMBS3906
Q833	9965 100 02429	PMBS3904
Q833	9965 100 14145	PMBS3904
Q834	9965 000 42650	2N7002
Q834	9965 000 44975	RK7002
Q834	9965 100 14147	FET 2N7002ESPT 0.3A/60V SOT-23
Q835	9965 000 35967	KEC 2N3906S-RTK/PS

Q835	9965 100 02478	PMBS3906
Q838	9965 100 02429	PMBS3904
Q838	9965 100 14145	PMBS3904
Q902	9965 100 14142	TR. STP20NM60 FP
Q903	9965 000 40063	FQPF8N80C
Q903	9965 000 44636	STP7NK80ZFP ST
Q903	9965 100 14143	STP8NK80ZFP BY ST TO-220FP
Q907	9965 100 14148	MMBT2907AK FAIRCHILD SOT-23
Q909	9965 000 44974	PMBS3904
Q909	9965 100 02429	PMBS3904
Q910	9965 000 42650	2N7002
Q910	9965 000 44975	RK7002
Q910	9965 100 14147	FET 2N7002ESPT 0.3A/60V SOT-23
Q911	9965 000 44974	PMBS3904
Q911	9965 100 02429	PMBS3904
Q912	9965 100 02478	PMBS3906
Q912	9965 100 14149	TRA MMBT3906 BLUE ROKET
BD901	9965 100 03551	BRIDGE 6A/600V GBU6J VISHAY
BD901	9965 100 03553	BRIDGE GBU606 6A/600V GBU
BD901	9965 100 14144	Diode GBU605

Main Power Supply Panel 47" [A]

Various

F901	9965 100 09807	FUSE 6.3A 250V,Time Lag Fuse
F901	9965 100 14728	FUSE 6.3A 250V LITTLEFUSE
FB903	9965 100 13133	FERRITE BEAD
FB903	9965 100 13135	FERRITE CORE 60R C8B RH TAP
FB904	9965 100 13133	FERRITE BEAD
FB904	9965 100 13135	FERRITE CORE 60R C8B RH TAP
FB919	9965 100 13134	FERRITE CORE 35R W5 RH
FB919	9965 100 14778	FERRITE BF-L25030W-768
FB920	9965 100 13134	FERRITE CORE 35R W5 RH
FB920	9965 100 14778	FERRITE BF-L25030W-768
FB921	9965 100 13134	FERRITE CORE 35R W5 RH
FB921	9965 100 14778	FERRITE BF-L25030W-768
FB922	9965 100 14723	FERRITE 510R C8B R6H 6x9.2(A)
FB923	9965 100 14723	FERRITE 510R C8B R6H 6x9.2(A)
SG1	9965 100 12262	SPARK GAP 200V GS41-201MA
SG2	9965 100 12262	SPARK GAP 200V GS41-201MA
SG3	9965 100 12262	SPARK GAP 200V GS41-201MA
SG4	9965 100 12262	SPARK GAP 200V GS41-201MA
ZD910	9965 100 14781	DIODE BZX79-C15 DO-35
ZD911	9965 100 14780	TVS P6KE160A DO-15
ZD911	9965 100 14782	DIODE P6KE160A DO-15
ZD911	9965 100 14783	DIODE P6KE160A DO-15

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C900	9965 100 14714	Y1 CAP 1000pF +-20% 250V
C901	9965 100 13036	Y1 CAP 470pF +-10% 250V
C902	9965 100 13036	Y1 CAP 470pF +-10% 250V
C907	9965 100 14715	EC 220uF 450V HS 35x32mm
C907	9965 100 14716	EC 220uF 450V LSG 35x30mm
C907	9965 100 14717	EC 220uF 450V PL 35x32mm
C908	9965 100 09805	0.68uF +-10%
C908	9965 100 14116	CAP X2 0.68U 275V MKP
C909	9965 100 09805	0.68uF +-10%
C909	9965 100 14116	CAP X2 0.68U 275V MKP
C910	9965 100 14710	CAP MPP 100NF 630V 5%
C910	9965 100 14711	CAP MPP 100NF 630V 5%
C912	9965 100 14755	CAP 0805 2U2 16V Y5V +-20%
C912	9965 100 14756	CAP 0805 2U2 16V Y5V -20%+80%
C912	9965 100 14757	CAP 0805 2.2UF Z 16V Y5V
C913	9965 100 13104	CAP 0805 1NF K 50V X7R
C913	9965 100 14753	CAP 0805 1N 50V X7R +-10%
C915	9965 100 14761	CAP 0805 470PF J 50V NPO
C916	9965 000 44874	CHIP 0.33UF -10% 25V X7R 0805
C916	9965 100 14760	CAP 0805 330N 25V X7R +-10%
C918	9965 000 44874	CHIP 0.33UF -10% 25V X7R 0805
C918	9965 100 14760	CAP 0805 330N 25V X7R +-10%
C920	9965 000 44874	CHIP 0.33UF -10% 25V X7R 0805
C920	9965 100 14760	CAP 0805 330N 25V X7R +-10%
C922	9965 100 11677	CAP CHIP 0805 100N 50V X7R
C923	9965 000 44874	CHIP 0.33UF -10% 25V X7R 0805
C923	9965 100 14760	CAP 0805 330N 25V X7R +-10%
C924	9965 100 11677	CAP CHIP 0805 100N 50V X7R
C925	9965 100 13103	CAP 0805 1NF J 50V NPO
C925	9965 100 14795	CAP 0805 1N 50V NPO +-5%
C926	9965 100 14793	C CAP. 1500PF 1KV
C927	9965 100 14758	CAP 0805 3N3 50V X7R +-10%
C927	9965 100 14759	CAP 0805 3300PF K 50V X7R
C928	9965 100 11677	CAP CHIP 0805 100N 50V X7R
C929	9965 100 12409	C CAP. 330PF 1KV RR
C930	9965 100 14794	C CAP. 220PF 1KV
C931	9965 100 14794	C CAP. 220PF 1KV
C932	9965 100 05859	0.01uF 50V 0805
C932	9965 100 14754	CAP 0805 10N 50V X7R +-10%
C934	9965 100 12272	105 J RADIAL E-CAPACTOR
C935	9965 100 14712	CAP MPP 2.2uF 450V 5%

C935	9965 100 14713	CAP MPP 2.2uF 450V 5%
C936	9965 100 12272	105 J RADIAL E-CAPACTOR
C937	9965 100 05859	0.01µF 50V 0805
C937	9965 100 14754	CAP 0805 10N 50V X7R +/-10%
C939	9965 100 11677	CAP CHIP 0805 100N 50V X7R
C940	9965 100 14791	F/C PPN 10N 100V 2%
C940	9965 100 14792	F/C PPN 10N 100V 5%
C942	9965 100 05859	0.01µF 50V 0805
C942	9965 100 14754	CAP 0805 10N 50V X7R +/-10%
C945	9965 100 03584	1500pF 10% 500V
C951	9965 100 13043	EC 1000uF 35V GF 13x25mm
C951	9965 100 13044	EC CAP 1000UF 35V 12.5*25mm
C952	9965 100 13043	EC 1000uF 35V GF 13x25mm
C952	9965 100 13044	EC CAP 1000UF 35V 12.5*25mm
C955	9965 100 14128	CAP 2200uF 10V 13*20mm
C955	9965 100 14722	CAP 2200uF 10V 13*20mm
C956	9965 100 14720	EC 1500UF 16V GF 13*20mm
C956	9965 100 14721	EC 1500UF 16V ED 13*20mm
C959	9965 100 03586	10uF 50V
C959	9965 100 14796	EC 10uF 50V PF 5x11 mm
C966	9965 100 14799	85 J RADIAL E-CAPACTOR 10uF25V
C967	9965 100 13152	EC 100uF 35V KM 8x11.5mm
C967	9965 100 14718	EC 100uF 35V RGA 8x11.5mm
C967	9965 100 14719	EC 100uF 35V PF 8x12mm
C968	9965 100 11677	CAP CHIP 0805 100N 50V X7R
C969	9965 100 14797	EC 33uF 50V KM 6.3x11mm
C969	9965 100 14798	EC 33uF 50V PF 6.3x11mm
CN901	9965 100 13055	AC SOCKET 3PIN+ 2 SCREW V/T
CN901	9965 100 13056	AC SOCKET V 3PST-01DR-BBBS3000

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R913	9965 100 14746	RSTR 33 KOHM +-5% 1/8W
R915	9965 100 02493	47kΩ 5% 1/8W
R916	9965 100 13080	RSTR 15KOHM +-5% 1/8W YAGEO
R917	9965 100 14766	12KOHM 5% 1/6W
R917	9965 100 14767	RST CFR 12K 1/6W 5%
R918	9965 100 14749	RSTR 68 KOHM +-5% 1/8W
R919	9965 000 44297	10kΩ 5% 1/8W
R920	9965 100 14762	CFR 10KOHM +-5% 1/6W
R920	9965 100 14763	RST CFR 12K 1/6W 5%
R924	9965 100 14777	RST MOF 0R12 1W 1%
R926	9965 100 14777	RST MOF 0R12 1W 1%
R928	9965 100 14768	2.7KOHM 5% 1/6W
R928	9965 100 14769	RST CFR 2K7 1/6W 5%
R929	9965 100 02493	47kΩ 5% 1/8W
R930	9965 100 14752	RSTR 4.7 KOHM +-5% 1/4W
R932	9965 100 14770	330 OHM +-5% 1/6W
R932	9965 100 14771	RST CFR 330R 1/6W 5%
R936	9965 100 11649	RST CHIPR 100 KOHM +-5% 1/8W
R937	9965 000 44296	2.2kΩ 1% 1/8W
R938	9965 100 11664	RST CHIPR 4.7 KOHM +-5% 1/8W
R939	9965 100 14743	RSTR 18 KOHM +-1% 1/8W
R940	9965 100 14741	RSTR 1.5 KOHM +-1% 1/8W
R941	9965 100 14743	RSTR 18 KOHM +-1% 1/8W
R943	9965 100 14774	470OHM +-5% 1/6W
R943	9965 100 14775	RST CFR 470R 1/6W 5%
R944	9965 100 11646	RST CHIPR 10 KOHM +-1% 1/8W
R945	9965 100 14740	RSTR 1KOHM +-1% 1/8W
R946	9965 100 14762	CFR 10KOHM +-5% 1/6W
R946	9965 100 14763	RST CFR 12K 1/6W 5%
R947	9965 100 14164	RSTR 22KOHM +-1% 1/8W YAGEO
R949	9965 100 12256	RST CHIPR 3.3 KOHM +-5% 1/8W
R952	9965 100 14747	RST 68R 1/8W 5%
R953	9965 100 11649	RST CHIPR 100 KOHM +-5% 1/8W
R954	9965 100 14742	RSTR 15 KOHM +-1% 1/8W
R955	9965 100 14772	3.3K OHM 5%*
R955	9965 100 14773	RST CFR 3K3 1/6W 5%
R956	9965 100 14747	RST 68R 1/8W 5%
R957	9965 100 14747	RST 68R 1/8W 5%
R958	9965 100 13079	RSTR 15 KOHM +-5% 1/8W
R959	9965 100 14750	RST 270K 1/4W 5%
R960	9965 100 14750	RST 270K 1/4W 5%
R961	9965 100 13096	RSTR 330 KOHM +-5% 1/4W
R962	9965 100 02493	47kΩ 5% 1/8W
R963	9965 100 11649	RST CHIPR 100 KOHM +-5% 1/8W
R964	9965 100 14779	PEAKING COIL 33U 10%
R965	9965 100 14751	RSTR 470 OHM +-5% 1/4W
R966	9965 100 14165	RSTR 2.2 KOHM +-5% 1/8W
R967	9965 100 11650	RST CHIPR 1 MOHM +-5% 1/8W
R968	9965 100 14751	RSTR 470 OHM +-5% 1/4W
R969	9965 100 14167	RSTR 1 MOHM +-1% 1/4W
R970	9965 100 14167	RSTR 1 MOHM +-1% 1/4W
R971	9965 100 14167	RSTR 1 MOHM +-1% 1/4W
R972	9965 100 14743	RSTR 18 KOHM +-1% 1/8W
R973	9965 100 14748	RST 680R 1/8W 1%
R976	9965 100 12314	RST CHIPR 22 OHM +-5% 1/4W
R979	9965 100 14744	RST 270R 1/8W 5%
R982	9965 100 13071	RSTR 100 OHM +-5% 1/8W
R983	9965 100 11645	RST CHIPR 10 OHM +-5% 1/8W
R984	9965 100 14745	RSTR 330 OHM +-5% 1/8W YAGEO
R985	9965 000 43476	4.7kΩ 5% 1/6W
R985	9965 100 14776	RST CFR 4K7 1/6W 5%

R986	9965 000 44297	10kΩ 5% 1/8W
R987	9965 100 14764	CFR 100KOHM +-5% 1/6W
R987	9965 100 14765	RST CFR 100K 1/6W 5%
R988	9965 100 11664	RST CHIPR 4.7 KOHM +-5% 1/8W
R989	9965 000 43476	4.7kΩ 5% 1/6W
R989	9965 100 14776	RST CFR 4K7 1/6W 5%
R990	9965 100 11664	RST CHIPR 4.7 KOHM +-5% 1/8W
R991	9965 000 44294	47Ω 5% 1/8W
RV902	9965 100 12249	VARIISTOR 510V TVR14511KFC4FY

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|      |                |                                |
|------|----------------|--------------------------------|
| L901 | 9965 000 43362 | Line Filter 8mH 4.0A           |
| L901 | 9965 100 05867 | 8µH 4.0A LF-006013-4           |
| L902 | 9965 000 43362 | Line Filter 8mH 4.0A           |
| L902 | 9965 100 05867 | 8µH 4.0A LF-006013-4           |
| L903 | 9965 100 14724 | PFC COIL 250uH 60mohmHJC-S7094 |
| L903 | 9965 100 14727 | XFMR 250uH QPH7008AL           |
| L906 | 9965 000 44634 | Coil 2.4µH 20% 4.5MΩ           |
| L906 | 9965 100 04990 | Coil 2.4uH 20% 4.5mΩ           |
| L907 | 9965 000 44635 | Coil 2.3uH 20% 7.2MΩ           |
| L907 | 9965 100 04989 | Coil 2.3µH 20% 7.2MΩ           |
| L908 | 9965 000 44635 | Coil 2.3uH 20% 7.2MΩ           |
| L908 | 9965 100 04989 | Coil 2.3µH 20% 7.2MΩ           |
| L909 | 9965 000 44635 | Coil 2.3uH 20% 7.2MΩ           |
| L909 | 9965 100 04989 | Coil 2.3µH 20% 7.2MΩ           |
| T904 | 9965 100 14135 | XFMR 970uH PPH7019AL           |
| T905 | 9965 100 14725 | XFMR 2.5mH PT-009983           |
| T905 | 9965 100 14726 | XFMR 2.5mH HJC-S7100           |

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|      |                |                                |
|------|----------------|--------------------------------|
| D901 | 9965 100 14730 | DIO SBT15006JST 15A/60V ML(LS) |
| D901 | 9965 100 14731 | DIO 60V/20A SBF2060CTITO-220AB |
| D902 | 9965 100 14730 | DIO SBT15006JST 15A/60V ML(LS) |
| D902 | 9965 100 14731 | DIO 60V/20A SBF2060CTITO-220AB |
| D903 | 9965 100 14736 | DIODE FMN-1106S 10A/600VTO-220 |
| D903 | 9965 100 14737 | Diode STTH8L06FP TO-220FP      |
| D908 | 9965 100 12260 | DIODE RGP10D DO-41             |
| D908 | 9965 100 13139 | RGP10D                         |
| D908 | 9965 100 13141 | RGP10D                         |
| D908 | 9965 100 14784 | DIODE BYT42D VISHAY            |
| D924 | 9965 100 14786 | DIODE UG1006 1A 800V DO-41     |
| D927 | 9965 100 13025 | DIODE 40V/10A SBF1040CT        |
| D928 | 9965 100 13025 | DIODE 40V/10A SBF1040CT        |
| D930 | 9965 100 14785 | DIODE BAV21 PHILIPS            |
| D931 | 9965 100 14785 | DIODE BAV21 PHILIPS            |
| D932 | 9965 100 14785 | DIODE BAV21 PHILIPS            |
| D936 | 9965 100 12260 | DIODE RGP10D DO-41             |
| D936 | 9965 100 13139 | RGP10D                         |
| D936 | 9965 100 13141 | RGP10D                         |
| D936 | 9965 100 14784 | DIODE BYT42D VISHAY            |
| D937 | 9965 100 12260 | DIODE RGP10D DO-41             |
| D937 | 9965 100 13139 | RGP10D                         |
| D937 | 9965 100 13141 | RGP10D                         |
| D937 | 9965 100 14784 | DIODE BYT42D VISHAY            |



|       |                |                                |
|-------|----------------|--------------------------------|
| IC901 | 9965 100 14738 | IC RESONANT L6599D SO-16N ST   |
| IC902 | 9965 000 44633 | SG6961                         |
| IC903 | 9965 100 13027 | IC TNY277PN DIP-8C             |
| IC909 | 9965 100 11602 | TCET1103G                      |
| IC909 | 9965 100 13026 | IC PC123Y82FZ0F                |
| IC910 | 9965 100 11602 | TCET1103G                      |
| IC910 | 9965 100 13026 | IC PC123Y82FZ0F                |
| IC911 | 9965 100 11602 | TCET1103G                      |
| IC911 | 9965 100 13026 | IC PC123Y82FZ0F                |
| IC913 | 9965 100 13142 | IC TL431ACZ-AP TO92            |
| IC913 | 9965 100 14185 | KIA431A-AT/P                   |
| IC913 | 9965 100 14787 | IC AZ431AZ-AE1 TO-92 AAC       |
| IC914 | 9965 100 13142 | IC TL431ACZ-AP TO92            |
| IC914 | 9965 100 14185 | KIA431A-AT/P                   |
| IC914 | 9965 100 14787 | IC AZ431AZ-AE1 TO-92 AAC       |
| Q902  | 9965 100 14729 | TRA STW25NM60N TO-247 ST       |
| Q915  | 9965 100 11509 | TRA BC847C 100mA/50V SOT-23    |
| Q915  | 9965 100 14739 | BC847C                         |
| Q916  | 9965 100 11509 | TRA BC847C 100mA/50V SOT-23    |
| Q916  | 9965 100 14739 | BC847C                         |
| Q917  | 9965 100 11509 | TRA BC847C 100mA/50V SOT-23    |
| Q917  | 9965 100 14739 | BC847C                         |
| Q918  | 9965 100 11509 | TRA BC847C 100mA/50V SOT-23    |
| Q918  | 9965 100 14739 | BC847C                         |
| Q919  | 9965 100 13057 | TRA 10A/500V STP11NK50ZFP      |
| Q919  | 9965 100 14735 | FET 2SK4097LS 9.5A/500V FI(LS) |
| Q920  | 9965 100 13057 | TRA 10A/500V STP11NK50ZFP      |
| Q920  | 9965 100 14735 | FET 2SK4097LS 9.5A/500V FI(LS) |
| Q921  | 9965 100 14788 | TRA TBC328-40 500mA/25V TO-92  |
| Q921  | 9965 100 14789 | TRA BC327 800mA/45V TO-92      |
| Q921  | 9965 100 14790 | TRA BC328-40 500mA/30V TO-92   |
| Q922  | 9965 100 14788 | TRA TBC328-40 500mA/25V TO-92  |
| Q922  | 9965 100 14789 | TRA BC327 800mA/45V TO-92      |

|       |                |                              |
|-------|----------------|------------------------------|
| Q922  | 9965 100 14790 | TRA BC328-40 500mA/30V TO-92 |
| Q923  | 9965 100 13061 | TRA SIG SM BC857CG (ONSE) R  |
| Q923  | 9965 100 13062 | TRA BC857C 100mA/50V SOT-23  |
| BD901 | 9965 100 14732 | BRIDGE D25XB60 25A 600V      |
| BD901 | 9965 100 14733 | BRIDGE GBJ2506 25A/600V      |
| BD901 | 9965 100 14734 | BRIDGE GBJ1506 15A/600V      |

## Small Signal Board [B]

### Various

|        |                |                                |
|--------|----------------|--------------------------------|
| 1256   | 9965 100 14234 | CPU ASSY(WELTREND)             |
| 1257   | 9965 100 14235 | FLASH ASSY                     |
| 1257   | 9965 100 14802 | SPI FLASH ASSY                 |
| FB1101 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB1102 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1201 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1202 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1203 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1204 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1205 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1206 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1301 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1302 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1303 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1304 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB1305 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB1401 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB1402 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1403 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1404 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB1501 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB1502 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB1503 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB1701 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB1702 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4101 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4201 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4202 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4203 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4204 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4205 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4206 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4207 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4208 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4401 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB4402 | 9965 100 04340 | Bead 120Ω/3000mA               |
| FB6101 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB6103 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB6201 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB6202 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB6203 | 9965 000 42238 | Bead 30Ω/700mA                 |
| FB7102 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7104 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7105 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7107 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7111 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7201 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7202 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7203 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7204 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7205 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7206 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7207 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7401 | 9965 100 02776 | Bead 120 Ohm 3A                |
| FB7403 | 9965 100 02776 | Bead 120 Ohm 3A                |
| TU1101 | 9965 100 14209 | TUNER TAFT-Z017D               |
| X1401  | 9965 100 13603 | XTL 1TC125DFNS004 32.768KHZ    |
| X4201  | 9965 000 44280 | Xtal 14.318Mhz 18pF            |
| X4201  | 9965 000 44281 | Xtal 14.318Mhz 18pF            |
| ZD1401 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1401 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1402 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1402 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1403 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1403 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1404 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1404 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1405 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1405 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1501 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1501 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1502 | 9965 100 03322 | BZX84-C5V6                     |
| ZD1502 | 9965 100 03325 | BZX84-C5V6                     |
| ZD1503 | 9965 100 14215 | IC RClamp0502B.TCT SC-75 3L    |
| ZD1504 | 9965 100 03320 | DIODE SMD ESD PROTECTOR        |
| ZD1505 | 9965 100 03320 | DIODE SMD ESD PROTECTOR        |
| ZD1506 | 9965 100 03320 | DIODE SMD ESD PROTECTOR        |
| ZD1507 | 9965 100 03320 | DIODE SMD ESD PROTECTOR        |
| ZD1508 | 9965 100 03320 | DIODE SMD ESD PROTECTOR        |
| ZD1509 | 9965 100 03320 | DIODE SMD ESD PROTECTOR        |
| ZD6101 | 9965 100 14233 | DIODE BZX84-B18 SOT-23 PHILIPS |

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| ZD7303 | 9965 100 03322 | BZX84-C5V6 |
| ZD7303 | 9965 100 03325 | BZX84-C5V6 |
| ZD7304 | 9965 100 03322 | BZX84-C5V6 |
| ZD7304 | 9965 100 03325 | BZX84-C5V6 |
| ZD7401 | 9965 100 03322 | BZX84-C5V6 |
| ZD7401 | 9965 100 03325 | BZX84-C5V6 |
| ZD7402 | 9965 100 03322 | BZX84-C5V6 |
| ZD7402 | 9965 100 03325 | BZX84-C5V6 |

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| C1101 | 9965 100 14181 | EC 2U2 50V PF 5x11mm        |
| C1101 | 9965 100 14203 | EC 2U2 50V KM 5x11mm        |
| C1101 | 9965 100 14204 | EC 2U2 50V RGA 5x11mm       |
| C1102 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1103 | 9965 000 42259 | 100pF 50V 0603              |
| C1103 | 9965 100 14226 | CAP 0603 100P 50V NPO +/-5% |
| C1104 | 9965 000 42259 | 100pF 50V 0603              |
| C1104 | 9965 100 14226 | CAP 0603 100P 50V NPO +/-5% |
| C1105 | 9965 000 44249 | 330nF 20% 16V               |
| C1106 | 9965 000 42607 | EC CAP 1000UF M 16V         |
| C1107 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1108 | 9965 100 11117 | EC 470uF 10V KW 8x9mm       |
| C1109 | 9965 100 04333 | 10μF 50V                    |
| C1113 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1114 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1115 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1116 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1204 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1205 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1206 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1207 | 9965 000 43977 | 1nF 5% 25V 0603             |
| C1211 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1212 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1213 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1214 | 9965 000 43977 | 1nF 5% 25V 0603             |
| C1303 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1306 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1309 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1311 | 9965 000 42722 | 6n8 50V X7R 0603            |
| C1312 | 9965 000 42722 | 6n8 50V X7R 0603            |
| C1401 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1405 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1406 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1407 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1408 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1409 | 9965 000 42232 | 47nF 16V X7R 0603           |
| C1501 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1504 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1505 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1508 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1509 | 9965 000 42233 | 10μF 20% 10V 1206           |
| C1510 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1511 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1512 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1513 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1514 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1515 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1516 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1517 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1518 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1519 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1520 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1521 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1522 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1523 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1524 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1526 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1528 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1529 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1530 | 9965 000 42262 | 100nF 50V Y5V 0603          |
| C1701 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1702 | 9965 000 43889 | 560pF 50V 0805              |
| C1703 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1704 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1705 | 9965 000 43889 | 560pF 50V 0805              |
| C1706 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1707 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1708 | 9965 000 43889 | 560pF 50V 0805              |
| C1709 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1710 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1711 | 9965 000 43889 | 560pF 50V 0805              |
| C1712 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1713 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1714 | 9965 000 43889 | 560pF 50V 0805              |
| C1715 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1716 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1717 | 9965 000 43889 | 560pF 50V 0805              |
| C1718 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1719 | 9965 000 42229 | 22pF 50V NPO 0603           |
| C1720 | 9965 000 43889 | 560pF 50V 0805              |
| C1721 | 9965 000 36040 | 0.1μF 10% 25V               |
| C1722 | 9965 000 42229 | 22pF 50V NPO 0603           |

|       |                |                                |       |                |                              |
|-------|----------------|--------------------------------|-------|----------------|------------------------------|
| C1723 | 9965 000 43889 | 560pF 50V 0805                 | C6133 | 9965 000 43989 | 470nF 20% 50V                |
| C1724 | 9965 000 36040 | 0.1µF 10% 25V                  | C6133 | 9965 100 14230 | CER 1206 470N 50V Y5V +/-20% |
| C4101 | 9965 000 42233 | 10µF 20% 10V 1206              | C6134 | 9965 000 42604 | 470µF 25V                    |
| C4102 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6134 | 9965 000 42605 | 470µF 25V EB 10X13mm         |
| C4103 | 9965 000 42229 | 22pF 50V NPO 0603              | C6135 | 9965 000 42604 | 470µF 25V                    |
| C4104 | 9965 000 42229 | 22pF 50V NPO 0603              | C6135 | 9965 000 42605 | 470µF 25V EB 10X13mm         |
| C4105 | 9965 000 42229 | 22pF 50V NPO 0603              | C6136 | 9965 000 43407 | 100nF 10% 50V 0805           |
| C4106 | 9965 000 42259 | 100pF 50V 0603                 | C6137 | 9965 100 04333 | 10µF 50V                     |
| C4109 | 9965 100 14199 | EC 4U7 50V KM 5*11mm           | C6138 | 9965 000 42260 | 10nF 50V X7R 0603            |
| C4109 | 9965 100 14200 | 4.7UF 20% 50V 105 J            | C6139 | 9965 000 42260 | 10nF 50V X7R 0603            |
| C4109 | 9965 100 14205 | EC 4U7 50V RGA 5*11mm          | C6140 | 9965 000 42400 | 1µF 10V Y5V 20% 0603         |
| C4201 | 9965 000 42233 | 10µF 20% 10V 1206              | C6141 | 9965 000 42400 | 1µF 10V Y5V 20% 0603         |
| C4202 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6142 | 9965 000 42263 | 0.47uF 5% 10V 0603           |
| C4203 | 9965 000 43488 | 100nF 25V 0603                 | C6143 | 9965 000 43407 | 100nF 10% 50V 0805           |
| C4204 | 9965 000 43488 | 100nF 25V 0603                 | C6144 | 9965 100 09799 | 220µF 16V                    |
| C4205 | 9965 000 43488 | 100nF 25V 0603                 | C6144 | 9965 100 09800 | 220µF 16V                    |
| C4206 | 9965 000 42233 | 10µF 20% 10V 1206              | C6145 | 9965 000 42245 | 330uF 20% 10V                |
| C4207 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6145 | 9965 000 42246 | 330uF 20% 10V                |
| C4208 | 9965 000 42233 | 10µF 20% 10V 1206              | C6145 | 9965 000 42247 | 330uF 10V                    |
| C4209 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6146 | 9965 000 42245 | 330uF 20% 10V                |
| C4210 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6146 | 9965 000 42246 | 330uF 20% 10V                |
| C4211 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6146 | 9965 000 42247 | 330uF 10V                    |
| C4212 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6147 | 9965 000 43407 | 100nF 10% 50V 0805           |
| C4213 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6153 | 9965 000 43488 | 100nF 25V 0603               |
| C4214 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6153 | 9965 100 14227 | CAP 0603 100N 25V X7R +/-10% |
| C4215 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6154 | 9965 000 43488 | 100nF 25V 0603               |
| C4216 | 9965 000 42233 | 10µF 20% 10V 1206              | C6154 | 9965 100 14227 | CAP 0603 100N 25V X7R +/-10% |
| C4217 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6155 | 9965 000 43989 | 470nF 20% 50V                |
| C4218 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6155 | 9965 100 14230 | CER 1206 470N 50V Y5V +/-20% |
| C4219 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6156 | 9965 000 43989 | 470nF 20% 50V                |
| C4220 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6156 | 9965 100 14230 | CER 1206 470N 50V Y5V +/-20% |
| C4221 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6157 | 9965 000 42696 | 1µF 10% 25V 0805             |
| C4222 | 9965 000 42233 | 10µF 20% 10V 1206              | C6158 | 9965 000 42696 | 1µF 10% 25V 0805             |
| C4223 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6159 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C4224 | 9965 000 42233 | 10µF 20% 10V 1206              | C6160 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C4225 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6161 | 9965 100 14196 | EC 470UF 10V KM 8*11.5mm     |
| C4226 | 9965 000 42233 | 10µF 20% 10V 1206              | C6161 | 9965 100 14197 | EC 470UF 10V RGA 8*11.5mm    |
| C4227 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6161 | 9965 100 14198 | EC 470UF 10V PF 8*12mm       |
| C4228 | 9965 000 42233 | 10µF 20% 10V 1206              | C6162 | 9965 000 42231 | 330pF 50V NPO 0603           |
| C4229 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6163 | 9965 000 42231 | 330pF 50V NPO 0603           |
| C4230 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6164 | 9965 000 42230 | 33pF 50V 0603                |
| C4231 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6165 | 9965 000 42230 | 33pF 50V 0603                |
| C4232 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6201 | 9965 100 06760 | 2.2nF 10% 50V                |
| C4233 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6202 | 9965 100 06760 | 2.2nF 10% 50V                |
| C4234 | 9965 000 43979 | 1nF 5% 50V 0603                | C6203 | 9965 000 42400 | 1µF 10V Y5V 20% 0603         |
| C4235 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6204 | 9965 000 42400 | 1µF 10V Y5V 20% 0603         |
| C4237 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6205 | 9965 000 42696 | 1µF 10% 25V 0805             |
| C4238 | 9965 100 11188 | CAP 0603 27P 50V NPO +/-5%     | C6206 | 9965 000 42696 | 1µF 10% 25V 0805             |
| C4239 | 9965 100 11188 | CAP 0603 27P 50V NPO +/-5%     | C6207 | 9965 000 42259 | 100pF 50V 0603               |
| C4240 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6208 | 9965 000 42259 | 100pF 50V 0603               |
| C4241 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6210 | 9965 000 43407 | 100nF 10% 50V 0805           |
| C4242 | 9965 000 42262 | 100nF 50V Y5V 0603             | C6211 | 9965 100 14193 | EC 100uF 35V KM 8x11.5mm     |
| C4244 | 9965 000 42232 | 47nF 16V X7R 0603              | C6211 | 9965 100 14194 | EC 100uF 35V RGA 8x11.5mm    |
| C4245 | 9965 000 42232 | 47nF 16V X7R 0603              | C6211 | 9965 100 14195 | EC 100uF 35V PF 8x12mm       |
| C4246 | 9965 000 42232 | 47nF 16V X7R 0603              | C6212 | 9965 100 04818 | 2.2uF 10% 25V                |
| C4247 | 9965 000 42232 | 47nF 16V X7R 0603              | C6213 | 9965 100 04818 | 2.2uF 10% 25V                |
| C4248 | 9965 000 42699 | 4.7U/25V X7R                   | C6214 | 9965 000 42259 | 100pF 50V 0603               |
| C4249 | 9965 000 42400 | 1µF 10V Y5V 20% 0603           | C6215 | 9965 000 42259 | 100pF 50V 0603               |
| C4250 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7101 | 9965 100 06753 | 47uF 25V                     |
| C4251 | 9965 100 04333 | 10µF 50V                       | C7101 | 9965 100 06754 | 47µF 25V                     |
| C4252 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7101 | 9965 100 06755 | 47µF 25V                     |
| C4254 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7102 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C4401 | 9965 000 42233 | 10µF 20% 10V 1206              | C7103 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C4402 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7104 | 9965 000 42230 | 33pF 50V 0603                |
| C4403 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7105 | 9965 000 44243 | 4.7uF 10V -20%               |
| C4404 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7106 | 9965 100 14202 | EC 47UF 25V GF 5*11mm        |
| C4405 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7107 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C4406 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7109 | 9965 000 43407 | 100nF 10% 50V 0805           |
| C4407 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7110 | 9965 000 45203 | 100uF 25V                    |
| C4408 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7110 | 9965 100 04042 | 100uF 25V                    |
| C4409 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7112 | 9965 000 44245 | 220nF 10% 25V 0805           |
| C4410 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7113 | 9965 000 45203 | 100uF 25V                    |
| C4411 | 9965 000 43979 | 1nF 5% 50V 0603                | C7113 | 9965 100 04042 | 100uF 25V                    |
| C4412 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7116 | 9965 000 45203 | 100uF 25V                    |
| C6101 | 9965 100 14229 | CAP 0805 330N 50V Y5V -20%+80% | C7116 | 9965 100 04042 | 100uF 25V                    |
| C6101 | 9965 100 14231 | CAP 0805 330N 50V Y5V -20%+80% | C7120 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C6102 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7121 | 9965 100 04333 | 10µF 50V                     |
| C6103 | 9965 100 04333 | 10µF 50V                       | C7122 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C6104 | 9965 000 42262 | 100nF 50V Y5V 0603             | C7123 | 9965 000 44247 | 100µF 10V                    |
| C6105 | 9965 000 42260 | 10nF 50V X7R 0603              | C7124 | 9965 100 06753 | 47uF 25V                     |
| C6106 | 9965 000 42260 | 10nF 50V X7R 0603              | C7124 | 9965 100 06754 | 47µF 25V                     |
| C6107 | 9965 000 42264 | 1µF 16V 0805                   | C7124 | 9965 100 06755 | 47µF 25V                     |
| C6108 | 9965 000 42264 | 1µF 16V 0805                   | C7125 | 9965 000 43488 | 100nF 25V 0603               |
| C6125 | 9965 000 43913 | 470µF 35V                      | C7126 | 9965 000 43488 | 100nF 25V 0603               |
| C6125 | 9965 000 43914 | 470µF 35V                      | C7127 | 9965 100 14228 | CAP 0603 68P 50V NPO +/-5%   |
| C6126 | 9965 000 43913 | 470µF 35V                      | C7128 | 9965 000 44243 | 4.7uF 10V -20%               |
| C6126 | 9965 000 43914 | 470µF 35V                      | C7129 | 9965 000 37776 | 100µF 25V                    |
| C6127 | 9965 000 43407 | 100nF 10% 50V 0805             | C7129 | 9965 100 14206 | EC 100UF/25V ED 6.3*11mm     |
| C6128 | 9965 000 42696 | 1µF 10% 25V 0805               | C7130 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C6129 | 9965 000 42696 | 1µF 10% 25V 0805               | C7131 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C6130 | 9965 000 42686 | 220nF 10% 25V                  | C7132 | 9965 100 04333 | 10µF 50V                     |
| C6131 | 9965 000 42686 | 220nF 10% 25V                  | C7133 | 9965 000 42262 | 100nF 50V Y5V 0603           |
| C6132 | 9965 000 43989 | 470nF 20% 50V                  | C7134 | 9965 000 44247 | 100µF 10V                    |
| C6132 | 9965 100 14230 | CER 1206 470N 50V Y5V +/-20%   | C7135 | 9965 000 43488 | 100nF 25V 0603               |

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| C7136  | 9965 100 04333 | 10µF 50V                      |
| C7137  | 9965 000 43488 | 100nF 25V 0603                |
| C7138  | 9965 000 44247 | 100µF 10V                     |
| C7139  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7140  | 9965 000 44245 | 220nF 10% 25V 0805            |
| C7141  | 9965 100 04333 | 10µF 50V                      |
| C7142  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7204  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7205  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7206  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7207  | 9965 000 42604 | 470µF 25V                     |
| C7207  | 9965 000 42605 | 470µF 25V EB 10X13mm          |
| C7208  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7209  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7210  | 9965 000 43913 | 470µF 35V                     |
| C7210  | 9965 000 43914 | 470µF 35V                     |
| C7211  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7212  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7213  | 9965 100 05088 | EC 220UF 25V GF 8*11.5mm      |
| C7213  | 9965 100 14201 | EC 220UF 25V ED 8*12mm        |
| C7301  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7302  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7303  | 9965 000 42230 | 33pF 50V 0603                 |
| C7305  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7401  | 9965 000 42604 | 470µF 25V                     |
| C7401  | 9965 000 42605 | 470µF 25V EB 10X13mm          |
| C7402  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7403  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7414  | 9965 100 04333 | 10µF 50V                      |
| C7415  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| C7416  | 9965 000 42262 | 100nF 50V Y5V 0603            |
| CN1303 | 9965 100 05113 | Jack 3.5mm 7p Bk              |
| CN1303 | 9965 100 11465 | PHONE JACK 3.5mm 7P BLACK     |
| CN1401 | 9965 100 11468 | D-SUB 15PIN FEMALE VERTICAL   |
| CN1401 | 9965 100 11469 | D-SUB CONN V 15P F            |
| CN1501 | 9965 100 11596 | HEADER 19P 5300-519-441-72    |
| CN1502 | 9965 100 11596 | HEADER 19P 5300-519-441-72    |
| CN1703 | 9965 100 11464 | PHONE JACK 3.5mm 3P V/A GREEN |
| CN1703 | 9965 100 11466 | PHONE JACK 3.5mm 3P V/T GREEN |
| CN7501 | 9965 100 04820 | Connector 30p                 |

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|       |                |                |
|-------|----------------|----------------|
| R1101 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R1102 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R1103 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1105 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1108 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1109 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R1111 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1112 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1201 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1202 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1203 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1204 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1205 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1206 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1207 | 9965 000 42224 | 470Ω 5% 1/10W  |
| R1208 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1209 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1210 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1211 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1212 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1213 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1214 | 9965 000 42224 | 470Ω 5% 1/10W  |
| R1301 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1302 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1303 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1304 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1305 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1306 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1307 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1401 | 9965 000 45228 | 2.7kΩ 5% 0.1W  |
| R1402 | 9965 000 42656 | 10Ω 5% 1/10W   |
| R1403 | 9965 000 45228 | 2.7kΩ 5% 0.1W  |
| R1404 | 9965 000 42656 | 10Ω 5% 1/10W   |
| R1405 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1415 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1416 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1417 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1418 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1419 | 9965 000 42219 | 2.2kΩ 5% 1/10W |
| R1420 | 9965 000 42219 | 2.2kΩ 5% 1/10W |
| R1421 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1422 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1423 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1424 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1425 | 9965 000 42227 | 75Ω 1% 1/10W   |
| R1426 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1427 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1428 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1429 | 9965 000 44262 | 47Ω 1% 1/10W   |
| R1430 | 9965 000 42214 | 10kΩ 5% 1/10W  |

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|-------|----------------|----------------|
| R1431 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R1502 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1503 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1504 | 9965 000 40053 | 1KΩ 1/10W 5%   |
| R1506 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1507 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1508 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1512 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1513 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R1514 | 9965 000 40053 | 1KΩ 1/10W 5%   |
| R1516 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1517 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1518 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1521 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1522 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1523 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1524 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1525 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1526 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1527 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1528 | 9965 000 43957 | 2.2Ω 5% 1/10W  |
| R1529 | 9965 000 42217 | 22Ω 5% 1/10W   |
| R1530 | 9965 000 42217 | 22Ω 5% 1/10W   |
| R1531 | 9965 000 42277 | 47kΩ 5% 1/10W  |
| R1532 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1533 | 9965 000 42277 | 47kΩ 5% 1/10W  |
| R1534 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1535 | 9965 000 42277 | 47kΩ 5% 1/10W  |
| R1536 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1537 | 9965 000 42225 | 4.7kΩ 5% 1/10W |
| R1538 | 9965 000 44044 | 1.8kΩ 5% 1/10W |
| R1539 | 9965 000 43958 | 1.5kΩ 5% 1/10W |
| R1701 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1702 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1703 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1704 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1705 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1706 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1707 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1708 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1709 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1710 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1711 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1712 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1713 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1714 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R1715 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R1716 | 9965 000 44265 | 12kΩ 5% 1/10W  |
| R4101 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4102 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4103 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4104 | 9965 000 42254 | 33kΩ 5% 1/10W  |
| R4105 | 9965 000 42254 | 33kΩ 5% 1/10W  |
| R4106 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4107 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4108 | 9965 000 42217 | 22Ω 5% 1/10W   |
| R4109 | 9965 000 42217 | 22Ω 5% 1/10W   |
| R4110 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4112 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4113 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4114 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4115 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4116 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4117 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4118 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4119 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4120 | 9965 000 42222 | 33Ω 5% 1/10W   |
| R4121 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4122 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4124 | 9965 000 42254 | 33kΩ 5% 1/10W  |
| R4127 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4128 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4129 | 9965 000 42254 | 33kΩ 5% 1/10W  |
| R4130 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4131 | 9965 000 42254 | 33kΩ 5% 1/10W  |
| R4132 | 9965 000 42254 | 33kΩ 5% 1/10W  |
| R4133 | 9965 000 42669 | 6.8kΩ 5% 1/10W |
| R4134 | 9965 000 42221 | 27kΩ 5% 1/10W  |
| R4135 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R4138 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R4139 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4140 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R4201 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4202 | 9965 000 42214 | 10kΩ 5% 1/10W  |
| R4205 | 9965 000 42213 | 100Ω 5% 1/10W  |
| R4207 | 9965 000 44263 | 390Ω 1% 1/10W  |
| R4208 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R4209 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R4210 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R4211 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R4212 | 9965 000 42212 | 0Ω 5% 1/10W    |
| R4213 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R4214 | 9965 000 42664 | 47Ω 5% 1/10W   |
| R4215 | 9965 000 42217 | 22Ω 5% 1/10W   |



|       |                |                              |       |                |                               |
|-------|----------------|------------------------------|-------|----------------|-------------------------------|
| R4216 | 9965 000 42217 | 22Ω 5% 1/10W                 | R6139 | 9965 100 05994 | 47kΩ 1% 1/10W                 |
| R4218 | 9965 000 40053 | 1KΩ 1/10W 5%                 | R6140 | 9965 000 42656 | 10Ω 5% 1/10W                  |
| R4219 | 9965 000 40053 | 1KΩ 1/10W 5%                 | R6145 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R4220 | 9965 000 40053 | 1KΩ 1/10W 5%                 | R6146 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R4221 | 9965 000 43487 | 3.3kΩ 5% 1/10W               | R6147 | 9965 000 42220 | 22kΩ 5% 1/10W                 |
| R4222 | 9965 000 42669 | 6.8kΩ 5% 1/10W               | R6148 | 9965 000 42220 | 22kΩ 5% 1/10W                 |
| R4223 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6149 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4227 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6150 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4230 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6151 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4232 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6151 | 9965 000 42397 | 15kΩ 5% 1/10W                 |
| R4233 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6152 | 9965 000 43973 | 10Ω 1/10W                     |
| R4235 | 9965 000 42213 | 100Ω 5% 1/10W                | R6153 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4237 | 9965 000 42254 | 33kΩ 5% 1/10W                | R6153 | 9965 000 42397 | 15kΩ 5% 1/10W                 |
| R4239 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6156 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4240 | 9965 000 42667 | 56Ω 5% 0.1W                  | R6157 | 9965 000 42212 | 0Ω 5% 1/10W                   |
| R4241 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6158 | 9965 000 42656 | 10Ω 5% 1/10W                  |
| R4242 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6158 | 9965 100 14217 | RSTR 10R 1/10W 5%             |
| R4243 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6163 | 9965 100 14225 | RSTR 2.2KOHM +-5% 1/4W        |
| R4244 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6164 | 9965 100 14225 | RSTR 2.2KOHM +-5% 1/4W        |
| R4245 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6165 | 9965 100 14225 | RSTR 2.2KOHM +-5% 1/4W        |
| R4246 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6166 | 9965 100 14225 | RSTR 2.2KOHM +-5% 1/4W        |
| R4247 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6167 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4248 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6168 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4251 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6169 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4252 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6170 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4253 | 9965 000 42254 | 33kΩ 5% 1/10W                | R6171 | 9965 000 42254 | 33kΩ 5% 1/10W                 |
| R4254 | 9965 000 42254 | 33kΩ 5% 1/10W                | R6172 | 9965 000 42254 | 33kΩ 5% 1/10W                 |
| R4256 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6173 | 9965 000 42656 | 10Ω 5% 1/10W                  |
| R4259 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6174 | 9965 000 42656 | 10Ω 5% 1/10W                  |
| R4260 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6175 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4261 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6176 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4262 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6201 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R4263 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6202 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R4264 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6203 | 9965 000 42220 | 22kΩ 5% 1/10W                 |
| R4265 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6204 | 9965 000 42220 | 22kΩ 5% 1/10W                 |
| R4266 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6205 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4267 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6206 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4268 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6207 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4269 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6208 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4270 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6209 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4271 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6210 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4272 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6211 | 9965 000 42254 | 33kΩ 5% 1/10W                 |
| R4273 | 9965 000 42664 | 47Ω 5% 1/10W                 | R6212 | 9965 000 42254 | 33kΩ 5% 1/10W                 |
| R4275 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6213 | 9965 000 43867 | 150Ω 5% 1/8W                  |
| R4276 | 9965 000 42254 | 33kΩ 5% 1/10W                | R6216 | 9965 000 42215 | 100kΩ 5% 1/10W                |
| R4277 | 9965 000 42214 | 10kΩ 5% 1/10W                | R6217 | 9965 000 42215 | 100kΩ 5% 1/10W                |
| R4278 | 9965 000 42254 | 33kΩ 5% 1/10W                | R6218 | 9965 000 43867 | 150Ω 5% 1/8W                  |
| R4279 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7101 | 9965 100 14223 | RSTR 560KOHM +-1% 1/10W YAGEO |
| R4280 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7102 | 9965 100 14222 | RST 162K 1/10W 1%             |
| R4281 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7103 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4282 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7104 | 9965 000 40053 | 1KΩ 1/10W 5%                  |
| R4283 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7105 | 9965 000 44266 | 56k Ohm 5% 0.1W               |
| R4284 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7106 | 9965 000 44266 | 56k Ohm 5% 0.1W               |
| R4287 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7107 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4289 | 9965 000 42664 | 47Ω 5% 1/10W                 | R7108 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4290 | 9965 000 42664 | 47Ω 5% 1/10W                 | R7109 | 9965 000 40053 | 1KΩ 1/10W 5%                  |
| R4291 | 9965 000 42664 | 47Ω 5% 1/10W                 | R7110 | 9965 000 44266 | 56k Ohm 5% 0.1W               |
| R4292 | 9965 000 42664 | 47Ω 5% 1/10W                 | R7111 | 9965 000 42215 | 100kΩ 5% 1/10W                |
| R4296 | 9965 000 42656 | 10Ω 5% 1/10W                 | R7112 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4297 | 9965 000 42656 | 10Ω 5% 1/10W                 | R7119 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4298 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7127 | 9965 000 42284 | 0Ω 1/10W                      |
| R4306 | 9965 000 42664 | 47Ω 5% 1/10W                 | R7128 | 9965 100 14223 | RSTR 560KOHM +-1% 1/10W YAGEO |
| R4307 | 9965 000 42254 | 33kΩ 5% 1/10W                | R7129 | 9965 100 14224 | RST 820K 1/10W 1%             |
| R4309 | 9965 000 42254 | 33kΩ 5% 1/10W                | R7130 | 9965 000 42284 | 0Ω 1/10W                      |
| R4310 | 9965 000 42254 | 33kΩ 5% 1/10W                | R7131 | 9965 100 14218 | RSTR 100 OHM +-1% 1/10W       |
| R4311 | 9965 000 42664 | 47Ω 5% 1/10W                 | R7131 | 9965 100 14219 | RSTR 100 OHM +-1% 1/10W YAGEO |
| R4312 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7132 | 9965 100 14220 | RSTR 110 OHM +-1% 1/10W       |
| R4401 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7132 | 9965 100 14221 | RSTR 110 OHM +-1% 1/10W YAGEO |
| R4402 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7133 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R4403 | 9965 000 42217 | 22Ω 5% 1/10W                 | R7134 | 9965 000 40053 | 1KΩ 1/10W 5%                  |
| R4404 | 9965 000 42217 | 22Ω 5% 1/10W                 | R7135 | 9965 000 44266 | 56k Ohm 5% 0.1W               |
| R4405 | 9965 000 42217 | 22Ω 5% 1/10W                 | R7136 | 9965 000 42215 | 100kΩ 5% 1/10W                |
| R4406 | 9965 000 42667 | 56Ω 5% 0.1W                  | R7137 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4407 | 9965 000 42667 | 56Ω 5% 0.1W                  | R7138 | 9965 000 42284 | 0Ω 1/10W                      |
| R4408 | 9965 000 42667 | 56Ω 5% 0.1W                  | R7201 | 9965 000 40053 | 1KΩ 1/10W 5%                  |
| R4409 | 9965 000 42667 | 56Ω 5% 0.1W                  | R7203 | 9965 000 42212 | 0Ω 5% 1/10W                   |
| R4410 | 9965 000 44264 | 150 Ohm 1% 0.5W              | R7204 | 9965 000 42656 | 10Ω 5% 1/10W                  |
| R4411 | 9965 000 42217 | 22Ω 5% 1/10W                 | R7205 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4414 | 9965 000 42213 | 100Ω 5% 1/10W                | R7206 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4415 | 9965 000 42213 | 100Ω 5% 1/10W                | R7208 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R4416 | 9965 000 42213 | 100Ω 5% 1/10W                | R7209 | 9965 000 42214 | 10kΩ 5% 1/10W                 |
| R4417 | 9965 000 42213 | 100Ω 5% 1/10W                | R7210 | 9965 000 42664 | 47Ω 5% 1/10W                  |
| R4420 | 9965 000 42214 | 10kΩ 5% 1/10W                | R7211 | 9965 000 42664 | 47Ω 5% 1/10W                  |
| R4421 | 9965 000 42212 | 0Ω 5% 1/10W                  | R7213 | 9965 000 42277 | 47kΩ 5% 1/10W                 |
| R6101 | 9965 000 42277 | 47kΩ 5% 1/10W                | R7214 | 9965 000 42664 | 47Ω 5% 1/10W                  |
| R6102 | 9965 000 40053 | 1KΩ 1/10W 5%                 | R7215 | 9965 000 42664 | 47Ω 5% 1/10W                  |
| R6103 | 9965 000 44266 | 56k Ohm 5% 0.1W              | R7217 | 9965 000 42225 | 4.7kΩ 5% 1/10W                |
| R6104 | 9965 100 07252 | RST CHIPR 180 KOHM +5% 1/10W | R7301 | 9965 000 43966 | 4.7Ω 5% 1/10W                 |
| R6106 | 9965 000 42213 | 100Ω 5% 1/10W                | R7302 | 9965 000 43966 | 4.7Ω 5% 1/10W                 |
| R6107 | 9965 000 42213 | 100Ω 5% 1/10W                | R7303 | 9965 000 42212 | 0Ω 5% 1/10W                   |
| R6108 | 9965 000 42220 | 22kΩ 5% 1/10W                | R7304 | 9965 000 42664 | 47Ω 5% 1/10W                  |
| R6109 | 9965 000 42220 | 22kΩ 5% 1/10W                | R7305 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R6137 | 9965 000 43958 | 1.5kΩ 5% 1/10W               | R7306 | 9965 000 42213 | 100Ω 5% 1/10W                 |
| R6138 | 9965 000 42224 | 470Ω 5% 1/10W                | R7307 | 9965 000 42213 | 100Ω 5% 1/10W                 |

|        |                |               |
|--------|----------------|---------------|
| R7308  | 9965 000 42217 | 22Ω 5% 1/10W  |
| R7309  | 9965 000 42217 | 22Ω 5% 1/10W  |
| R7310  | 9965 000 42212 | 0Ω 5% 1/10W   |
| R7401  | 9965 000 42213 | 100Ω 5% 1/10W |
| R7402  | 9965 000 42213 | 100Ω 5% 1/10W |
| R7403  | 9965 000 42213 | 100Ω 5% 1/10W |
| R7406  | 9965 000 42214 | 10kΩ 5% 1/10W |
| R7415  | 9965 000 42664 | 47Ω 5% 1/10W  |
| R7416  | 9965 000 42664 | 47Ω 5% 1/10W  |
| R7502  | 9965 000 42212 | 0Ω 5% 1/10W   |
| R7504  | 9965 000 42212 | 0Ω 5% 1/10W   |
| RP4401 | 9965 000 43952 | 47Ω 5% 1/16W  |
| RP4402 | 9965 000 43952 | 47Ω 5% 1/16W  |
| RP4403 | 9965 000 43952 | 47Ω 5% 1/16W  |
| RP4404 | 9965 000 43952 | 47Ω 5% 1/16W  |
| RP4405 | 9965 000 43952 | 47Ω 5% 1/16W  |
| RP4406 | 9965 000 43952 | 47Ω 5% 1/16W  |
| RP4407 | 9965 000 43952 | 47Ω 5% 1/16W  |



|        |                |                               |
|--------|----------------|-------------------------------|
| L6101  | 9965 100 13052 | COIL 35uH+/-10% 82mohm DR10*8 |
| L6101  | 9965 100 14207 | COIL 35uH+/-10% 82mohm DR10*8 |
| L6101  | 9965 100 14208 | COIL 35uH+/-10% 82mohm DR10*8 |
| L6102  | 9965 100 13052 | COIL 35uH+/-10% 82mohm DR10*8 |
| L6102  | 9965 100 14207 | COIL 35uH+/-10% 82mohm DR10*8 |
| L6102  | 9965 100 14208 | COIL 35uH+/-10% 82mohm DR10*8 |
| L7101  | 9965 100 14232 | COILSMD 6.8uH 20% SLF10155T   |
| L7103  | 9965 100 03222 | 15μH 20%                      |
| TH7401 | 9965 100 02440 | PTC KMC5S075R001              |
| TH7401 | 9965 100 04456 | PTC 0.45Ω 13.2V               |



|       |                |                            |
|-------|----------------|----------------------------|
| D1401 | 9965 000 44258 | BAT54C PHILIPS             |
| D1401 | 9965 100 06782 | BAT54C(L43)                |
| D1501 | 9965 000 44258 | BAT54C PHILIPS             |
| D1501 | 9965 100 06782 | BAT54C(L43)                |
| D1502 | 9965 000 44258 | BAT54C PHILIPS             |
| D1502 | 9965 100 06782 | BAT54C(L43)                |
| D1503 | 9965 000 44258 | BAT54C PHILIPS             |
| D1503 | 9965 100 06782 | BAT54C(L43)                |
| D1504 | 9965 000 44258 | BAT54C PHILIPS             |
| D1504 | 9965 100 06782 | BAT54C(L43)                |
| D1505 | 9965 000 44258 | BAT54C PHILIPS             |
| D1505 | 9965 100 06782 | BAT54C(L43)                |
| D4101 | 9965 000 39751 | 0Ω 1/8W                    |
| D6101 | 9965 100 10423 | DIODE 3A/200V S3D DO-214AB |



|       |                |                                |
|-------|----------------|--------------------------------|
| Q1501 | 9965 000 42650 | 2N7002                         |
| Q1501 | 9965 000 42651 | 2N7002                         |
| Q1501 | 9965 100 03293 | RK7002                         |
| Q1501 | 9965 100 14147 | FET 2N7002ESPT 0.3A/60V SOT-23 |
| Q1502 | 9965 000 42650 | 2N7002                         |
| Q1502 | 9965 000 42651 | 2N7002                         |
| Q1502 | 9965 100 03293 | RK7002                         |
| Q1502 | 9965 100 14147 | FET 2N7002ESPT 0.3A/60V SOT-23 |
| Q1503 | 9965 100 02479 | BC847C                         |
| Q1503 | 9965 100 03458 | BC847C                         |
| Q1504 | 9965 100 02479 | BC847C                         |
| Q1504 | 9965 100 03458 | BC847C                         |
| Q1505 | 9965 100 02479 | BC847C                         |
| Q1505 | 9965 100 03458 | BC847C                         |
| Q1506 | 9965 100 02479 | BC847C                         |
| Q1506 | 9965 100 03458 | BC847C                         |
| Q1507 | 9965 100 02479 | BC847C                         |
| Q1507 | 9965 100 03458 | BC847C                         |
| Q4201 | 9965 000 42650 | 2N7002                         |
| Q4201 | 9965 000 42651 | 2N7002                         |
| Q4201 | 9965 100 03293 | RK7002                         |
| Q4201 | 9965 100 14147 | FET 2N7002ESPT 0.3A/60V SOT-23 |
| Q6101 | 9965 100 02479 | BC847C                         |
| Q6101 | 9965 100 03458 | BC847C                         |
| Q6103 | 9965 100 02479 | BC847C                         |
| Q6103 | 9965 100 03458 | BC847C                         |
| Q6104 | 9965 100 02479 | BC847C                         |
| Q6104 | 9965 100 03458 | BC847C                         |
| Q6105 | 9965 000 45224 | SI4835BDY                      |
| Q6106 | 9965 000 37397 | MUN2211J                       |
| Q6106 | 9965 000 42211 | PDTC114EK SC-59                |
| Q6107 | 9965 100 02479 | BC847C                         |
| Q6107 | 9965 100 03458 | BC847C                         |
| Q7101 | 9965 000 37397 | MUN2211J                       |
| Q7101 | 9965 000 42211 | PDTC114EK SC-59                |
| Q7102 | 9965 100 02479 | BC847C                         |
| Q7102 | 9965 100 03458 | BC847C                         |
| Q7103 | 9965 000 45224 | SI4835BDY                      |
| Q7104 | 9965 000 37397 | MUN2211J                       |
| Q7104 | 9965 000 42211 | PDTC114EK SC-59                |
| Q7105 | 9965 100 02479 | BC847C                         |

|       |                |                                |
|-------|----------------|--------------------------------|
| Q7105 | 9965 100 03458 | BC847C                         |
| Q7106 | 9965 000 45224 | SI4835BDY                      |
| Q7112 | 9965 000 37397 | MUN2211J                       |
| Q7112 | 9965 000 42211 | PDTC114EK SC-59                |
| Q7113 | 9965 100 02479 | BC847C                         |
| Q7113 | 9965 100 03458 | BC847C                         |
| Q7114 | 9965 000 45224 | SI4835BDY                      |
| Q7201 | 9965 100 02479 | BC847C                         |
| Q7201 | 9965 100 03458 | BC847C                         |
| Q7202 | 9965 100 02479 | BC847C                         |
| Q7202 | 9965 100 03458 | BC847C                         |
| Q7301 | 9965 000 42650 | 2N7002                         |
| Q7301 | 9965 000 42651 | 2N7002                         |
| Q7301 | 9965 100 03293 | RK7002                         |
| Q7301 | 9965 100 14147 | FET 2N7002ESPT 0.3A/60V SOT-23 |
| Q7401 | 9965 100 02479 | BC847C                         |
| Q7401 | 9965 100 03458 | BC847C                         |
| U1401 | 9965 000 35965 | M24C02-WMN6TP                  |
| U1401 | 9965 100 08599 | AT24C02BN                      |
| U1501 | 9965 000 35965 | M24C02-WMN6TP                  |
| U1501 | 9965 100 08599 | AT24C02BN                      |
| U1502 | 9965 000 35965 | M24C02-WMN6TP                  |
| U1502 | 9965 100 08599 | AT24C02BN                      |
| U1503 | 9965 100 14214 | IC PI3HDMI1212BE TSSOP-80      |
| U4201 | 9965 100 14216 | IC MST98981CLD-LF LQFP-256     |
| U4203 | 9965 000 44284 | M24C32-WMN6TP                  |
| U4203 | 9965 100 14801 | IC AT24C32CN-SH-T SO8          |
| U4401 | 9965 100 04673 | HY5DU281622FTP-5-C             |
| U4401 | 9965 100 14212 | IC HYB25DC128160CE-5 TSOP1166  |
| U6102 | 9965 100 14213 | IC TPA3120D2PWPR HTSSOP24      |
| U6103 | 9965 000 42394 | TPA6110A2DGBRG4                |
| U6104 | 9965 100 14210 | IC DRV601RTJR QFN-20           |
| U6201 | 9965 100 04345 | IC TL062CD SO-8                |
| U7101 | 9965 100 14211 | IC AIC1550POTR MSOP8           |
| U7103 | 9965 000 44276 | AME8815AEGT330Z                |
| U7104 | 9965 100 14211 | IC AIC1550POTR MSOP8           |
| U7105 | 9965 000 44276 | AME8815AEGT330Z                |
| U7106 | 9965 100 11788 | AME1117ACGTZ                   |

## Side IO Panel [D]



|        |                |                             |
|--------|----------------|-----------------------------|
| CN0301 | 9965 100 05113 | Jack 3.5mm 7p Bk            |
| CN0301 | 9965 100 11465 | PHONE JACK 3.5mm 7P BLACK   |
| CN0303 | 9965 100 14805 | S JACK + RCA JACK 1*3 Y/W/R |

## Keyboard & Control Panel [E]

### Various

|        |                |                               |
|--------|----------------|-------------------------------|
| SW0101 | 9965 100 02692 | TACT SWITCH TSAB-2-NP         |
| SW0101 | 9965 100 03591 | SWI TACT H=5 GY 160G SKHHAM B |
| SW0101 | 9965 100 14241 | TACT SW SKQRAAE010 BY ALPS    |
| SW0102 | 9965 100 02692 | TACT SWITCH TSAB-2-NP         |
| SW0102 | 9965 100 03591 | SWI TACT H=5 GY 160G SKHHAM B |
| SW0102 | 9965 100 14241 | TACT SW SKQRAAE010 BY ALPS    |
| SW0103 | 9965 100 02692 | TACT SWITCH TSAB-2-NP         |
| SW0103 | 9965 100 03591 | SWI TACT H=5 GY 160G SKHHAM B |
| SW0103 | 9965 100 14241 | TACT SW SKQRAAE010 BY ALPS    |
| SW0104 | 9965 100 02692 | TACT SWITCH TSAB-2-NP         |
| SW0104 | 9965 100 03591 | SWI TACT H=5 GY 160G SKHHAM B |
| SW0104 | 9965 100 14241 | TACT SW SKQRAAE010 BY ALPS    |
| SW0105 | 9965 100 02692 | TACT SWITCH TSAB-2-NP         |
| SW0105 | 9965 100 03591 | SWI TACT H=5 GY 160G SKHHAM B |
| SW0105 | 9965 100 14241 | TACT SW SKQRAAE010 BY ALPS    |
| SW0106 | 9965 100 02692 | TACT SWITCH TSAB-2-NP         |
| SW0106 | 9965 100 03591 | SWI TACT H=5 GY 160G SKHHAM B |
| SW0106 | 9965 100 14241 | TACT SW SKQRAAE010 BY ALPS    |



|        |                |                                |
|--------|----------------|--------------------------------|
| C0101  | 9965 000 42262 | 100nF 50V Y5V 0603             |
| C0102  | 9965 000 42262 | 100nF 50V Y5V 0603             |
| C0103  | 9965 000 42262 | 100nF 50V Y5V 0603             |
| CN0101 | 9965 100 14240 | WAFER 4P RIGHT ANGLE PITCH 2.0 |



|       |                |                |
|-------|----------------|----------------|
| R0101 | 9965 000 42224 | 470Ω 5% 1/10W  |
| R0102 | 9965 000 43490 | 5.6kΩ 5% 0.1W  |
| R0103 | 9965 000 42219 | 2.2kΩ 5% 1/10W |
| R0104 | 9965 000 42224 | 470Ω 5% 1/10W  |
| R0105 | 9965 000 43490 | 5.6kΩ 5% 0.1W  |

IR & LED Panel [J]

Various

|        |                |                 |
|--------|----------------|-----------------|
| FB0201 | 9965 000 43995 | Bead 600Ω/200mA |
| FB0201 | 9965 000 43997 | Bead 600Ω/500mA |
| FB0201 | 9965 100 02513 | Bead 600Ω/200mA |
| FB0202 | 9965 000 43995 | Bead 600Ω/200mA |
| FB0202 | 9965 000 43997 | Bead 600Ω/500mA |
| FB0202 | 9965 100 02513 | Bead 600Ω/200mA |
| FB0203 | 9965 000 43995 | Bead 600Ω/200mA |
| FB0203 | 9965 000 43997 | Bead 600Ω/500mA |
| FB0203 | 9965 100 02513 | Bead 600Ω/200mA |
| FB0204 | 9965 000 43995 | Bead 600Ω/200mA |
| FB0204 | 9965 000 43997 | Bead 600Ω/500mA |
| FB0204 | 9965 100 02513 | Bead 600Ω/200mA |
| FB0205 | 9965 000 43995 | Bead 600Ω/200mA |
| FB0205 | 9965 000 43997 | Bead 600Ω/500mA |
| FB0205 | 9965 100 02513 | Bead 600Ω/200mA |



|        |                |                    |
|--------|----------------|--------------------|
| C0201  | 9965 000 43985 | 1μF 20% 16V        |
| C0202  | 9965 000 42259 | 100pF 50V 0603     |
| C0203  | 9965 000 43980 | 100nF 20% 25V 0603 |
| C0204  | 9965 000 43980 | 100nF 20% 25V 0603 |
| C0205  | 9965 000 43980 | 100nF 20% 25V 0603 |
| CN0201 | 9965 100 12411 | AUDIO IN           |



|       |                |                             |
|-------|----------------|-----------------------------|
| R0201 | 9965 100 04341 | RST CHIP 1K2 1/10W 5%       |
| R0202 | 9965 000 42218 | 220Ω 5% 1/10W               |
| R0203 | 9965 000 42225 | 4.7kΩ 5% 1/10W              |
| R0204 | 9965 000 42225 | 4.7kΩ 5% 1/10W              |
| R0205 | 9965 000 42214 | 10kΩ 5% 1/10W               |
| R0206 | 9965 000 42223 | RST CHIPR 390 OHM -5% 1/10W |
| R0207 | 9965 000 42225 | 4.7kΩ 5% 1/10W              |
| R0208 | 9965 000 42214 | 10kΩ 5% 1/10W               |



|         |                |                                |
|---------|----------------|--------------------------------|
| LED0201 | 9965 100 14237 | LED SM white KPL-3015PWF-A     |
| LED0202 | 9965 100 14238 | LED SM Hyper red KPL-3015SURCK |



|       |                |              |
|-------|----------------|--------------|
| Q0201 | 9965 100 03458 | BC847C       |
| Q0202 | 9965 100 03458 | BC847C       |
| U0201 | 9965 000 42727 | TSOP34136SB1 |

## 11. Revision List

Manual xxxx xxx xxxx.0

- First release.